Death Edit Specifications For the 2003 Proposed Revision of the U.S. Standard Certificate of Death

Table of Contents

Item Title: **DECEDENT'S LEGAL NAME
                 (INCLUDE AKA's, IF ANY)**

Item Number: **1**

Description**:**   The current legal name of the decedent. Includes first name,
                 middle name, surname, and all AKA's.

Source of Information:

    Preferred Source: Informant
    Other Acceptable Sources: Legal documents or other records

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

This is the most important item on the certificate for legal and personal use by the family.
NCHS only gets names for National Death Index (NDI) use. There are alternate spellings to
many names and it is critical for the family to have the name spelled correctly.

The hospital, nursing home, physician or coroner may have entered the name of the deceased in
the left hand margin of the certificate. Do not copy this name for entry on the certificate; it may
be incomplete or incorrect.

It is suggested that you print the name as provided to you by the informant and have the
informant check the spelling and order of names before entering the name on the certificate.

If there appears to be more than one spelling of any name provided, and the correct spelling
cannot be verified, use the most common spelling. The name must consist of English alphabetic
characters and punctuation marks.

If a name such a "Baby Boy Watts" is obtained from medical records for the death of a newborn,
check with the parents or other informant to see if the child had a given name. If the child had
not been named, enter only the surname.

If the Medical Examiner or Coroner cannot determine the name of a found body, enter
"Unknown" in the name field. Do not enter names such as "John Doe" or "Jane Doe."

AKA (also known as) is another name the decedent used or was known as. It should be listed if
it is substantially different from the decedent's legal name (e.g., Samuel Langhorne Clemens

5/4/2001

AKA Mark Twain, but not Jonathon Doe AKA John Doe). The State may enter the full alias rather than just the part of the name that differs from the legal name.

AKA does not include:
>nicknames, unless used for legal purposes or at the family's request
>spelling variations of the first name
>presence or absence of middle initial
>presence or absence of punctuation marks or spaces
>variations in spelling of common elements of the surname, such as "Mc" and
>>"Mac" or "St." and "Saint."

>ASK THE INFORMANT

>What was _____'s current complete legal name starting with the first name?

>Record the name provided by the informant on a separate sheet of paper and verify the name, spelling, and order of the names with the informant.

>Once the name is verified, print or type the name on the certificate.

>ASK-- Did _____ use any other names, or go by any other names?

>If informant indicates "No," go on to the next item.
>If informant indicates "Yes,"

>>ASK-- Could you tell me the names?

>>Print the alias name(s) on the certificate in the name field as best as possible with "AKA" preceding the name(s).

>>Repeat until there are no more names to record.

FOR AN ELECTRONIC RECORD:

Funeral Director

It is suggested that you print the name as provided to you by the informant and have the informant check the spelling and order of names before entering the name into the computer.

If there appears to be more than one spelling of any name provided and the correct spelling cannot be verified, use the most common spelling. The name must consist of English alphabetic characters and punctuation marks.

The Certifying physician, Pronouncing physician, Medical Examiner, or Coroner may have already entered a name on the EDR. If so, please check the name against what you receive from the informant. If the names are different, resolve the discrepancy, and enter the correct name.

5/4/2001

ASK THE INFORMANT:

What was _____'s current legal name starting with the first name?

Record the name provided by the informant and go over the name with the informant to be sure what should go in the first name field, the middle name field and the surname field.

ASK THE INFORMANT:

Did _____ use any other names, or go by any other names?

If informant indicates "Yes," ASK

Could you tell me the names?

Record the alias name with AKA preceding the name.

ASK THE INFORMANT

Are there other names?

Repeat until there are no other names provided.

EDR Developer

While the paper death certificate does not have separate boxes for the names of the decedent, the EDR should have separate fields for first, middle, surname, surname suffix, and an alias indicator.

The Certifying physician, Pronouncing physician, Medical Examiner, or Coroner may have already entered a name on the EDR. Ownership of the content of this item rests with the funeral director, so the funeral director may need to enter the correct name.

When the name screen appears, display the following at the top of the screen until all the name fields are completed.

It is suggested that you print out the name as provided to you by the informant and have the informant check the spelling and order of names before entering the name into the computer.

If there appears to be more than one spelling of any name provided and the correct spelling cannot be verified, use the most common spelling.

When completing the first name entry box or the middle name entry box, the following message should pop up.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

☐   **Help on multiple first or middle names**
☐   **Initials**
☐   **Religious names and titles**
☐   **No first or middle names (infants)**
☐   **Aliases**

If the first help box is checked, the following instruction appears:

Multiple first or middle names

If the informant indicates two first names separated by a space, such as "Mary Louise Carter," verify that "Louise" is part of the first name and is not a middle name.

Enter the two first names with a blank space between them.

If several middle names are given, enter all with a space between the names.

If the second help box is checked, the following instruction appears:

Initials

If the informant indicates that the person uses a first initial such as "E. Charles Jones," try to obtain the whole first name.

If the name can be obtained enter the whole first name. If not, enter just the initial followed by a period.

If the informant indicates two initials and a surname such as "H.S. Green," determine if these are a first and middle initial, or two first initials with no middle name or initial. Try to obtain the whole name(s).

If the names can be obtained, enter the whole names in the appropriate spaces. If there are no whole names then enter the initials in the appropriate spaces. Each initial should be followed by a period.

If the third help box is checked, the following instruction appears:

Religious names and titles

5/4/2001

If there is a title preceding the name, such as "Doctor," do not enter the title in any of the name fields.

For religious names such as "Sister Mary Lawrence," enter "Sister Mary" in the first name field.

If the fourth help box is checked, the following instruction appears:

No first or middle names (infants)

If a name such as "Baby Boy Watts" is obtained from medical records for the death of a newborn, check with the parents or other informant to see if the child had a given name.

If the child had not been given a name, leave the first and middle name fields blank and enter only the surname.

If the fifth help box is checked, the following instructions appear:

Aliases

AKA (also known as) is another name the decedent used or was known as. It should be listed if it is substantially different from the decedent's legal name (e.g., Samuel Langhorne Clemens AKA Mark Twain, but not Jonathon Doe AKA John Doe).

AKA does not include:
nicknames, unless used for legal purposes or at the family's request
spelling variations of the first name
presence or absence of middle initial
presence or absence of punctuation marks or spaces
variations in spelling of common elements of the surname, such as
"Mc" and "Mac" or "St." and "Saint."

Complete the current legal name before entering any aliases.

If the informant indicates that the decedent has one or more aliases, check the alias box. The Alias name entry field should appear. Enter the names as indicated.

The full alias may be entered rather than just the part of the name that differs from the legal name.

If the decedent only has a first name alias, enter only the first name and leave the remaining fields blank.

If the decedent only had a surname alias, enter only the surname and leave the remaining fields blank.

5/4/2001

If the decedent has more than one alias, check the additional alias box after the first alias name is entered.

When the alias box is checked for the first time, the alias flag is set to "9" for the master record. A duplicate record may be created at this time for the first alias with the alias flag set to values 1-8 (see below) OR the names can be recorded in a name table and duplicate records for each name are created later for transmission to NCHS.

The alias indicator field is defaulted to 0 and is set to 9 for a master record with one or more aliases, 1 for the first alias record, 2 for the second alias record, and so on.

When only a first name alias is given, the surname will be that of the master record. The name table or duplicate record should contain complete names.

When the surname entry box is being completed, the following message should pop up:

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

☐ **Multiple surnames**
☐ **Unknown surname**
☐ **Special characters in surnames**
☐ **Surname suffixes**
☐ **Aliases**

If the first help box is checked, the following instruction appears:

Multiple surnames

If more than one surname is given separated by a hyphen, enter exactly as given with the hyphen. If there is more than one surname and no hyphen, enter the two names with a space between them.

If the second help box is checked, the following instruction appears:

Unknown surname

If the surname is unknown, enter "unknown" in the surname field and leave the other fields blank.

If the third help box is checked, the following instruction appears:

Special characters in surnames

If the surname has a space or apostrophe following prefixes, such as Mac Pherson or O'Toole, enter as given with the space or apostrophe.

If the fourth help box is checked, the following instruction appears:

Surname suffixes

Suffixes and generation identifiers are to be entered in the suffix field.

If the fifth help box is checked, the alias instructions (above) should appear.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
GNAME	First name	Alpha characters	
MNAME	Middle name	Alpha characters	
LNAME	Surname	Alpha characters	
SUFF	Surname suffix	Alpha characters	
ALIAS	Alias	0	Original record with no alias
		9	Original record with alias
		1	First alias record
		2-8	Second – Eighth alias record

EDITS:

Before the record is transmitted to the State

BOTH ELECTRONIC AND PAPER RECORDS

There must be an entry in the surname. All the fields cannot be blank.

All name fields must contain English alphabetic characters and punctuation characters.

The alias flag must have a valid character.

STATE FILE CONSIDERATIONS

It is recommended that states keep name information in as detailed a format as possible. See the recommended electronic format below. States may want to design their paper certificate or the instructions to facilitate the separation of first names, middle names, and surnames. For data collected on paper records, keying instructions need to be the same as those for the electronic record.

5/4/2001

States may want to consider using a name table array for aliases rather than creating multiple complete records for aliases at the time of data entry.

NCHS TRANSMISSION FILE

If there is a middle name or initials, take the first letter in the middle name field as the middle initial.

Eliminate any punctuation characters after initials.

A separate complete record for each alias is to be transmitted.

VARIABLES:

NAME	LENGTH	TYPE	VALUES
GNAME	50	Alpha character string	Alpha characters
MNAME	1	Alpha character string	Alpha character
LNAME	50	Alpha character string	Alpha characters
SUFF	10	Alpha character string	Alpha characters
ALIAS	1	Numeric character string	0-9

Transmitted to NCHS for NDI application only.

EDI TRANSMISSION:

No standards set yet.

5/4/2001

Item Title: **SEX**

Item Number: **2**

Description: The sex of the deceased.

Source of Information:

    Preferred Source: Funeral Director
    Other Acceptable Sources**:**   Medical Records
                                         Medical Examiner or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

Response is based on observation or consultation with the certifying physician.

Enter one of the following responses:

        Male
        Female
        Unknown

FOR AN ELECTRONIC RECORD:

EDR Developer

When the item is to be completed, the following menu should be used to select one response:

        Sex

        ☐   **Male**
        ☐   **Female**
        ☐   **Unknown**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
SEX	The sex of the deceased	M	Male
		F	Female
		U	Unknown
SEX_BYPASS	Edit flag	0	Off (edit passed)
		1	On (edit failed, data queried, and verified)

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

Item must be completed.

PAPER RECORD

Records filed with this field blank are queried. If there is no response to the query, assign the "Unknown" code.

State edits of data file prior to NCHS transmission

Code for sex is compared with a list of sex-specific causes of death. See Appendix A (Source: http://www.cdc.gov/nchs/data/2001_PT11finl_B.pdf)

If the edit fails (the sex and cause are incompatible), reject the record and query the funeral director. If the funeral director's response to sex is the same as that on the record, query the physician. If the physician's response does not change either the cause of death or the sex, set SEX_BYPASS to "ON-1."

STATE FILE CONSIDERATIONS

If the state does not process its own cause-of-death data, the sex/cause edit cannot be done at the state level. These states will be at a disadvantage in correcting this type of potential error if they have to wait until NCHS picks up these questionable cases in the files. If cause-of-death data becomes available at a later date than the demographic information, updated files may be transmitted to NCHS that incorporate the sex/cause edit.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	**LENGTH**	**TYPE**	**VALUES**
SEX	1	Alpha character string	M, F, U
SEX_BYPASS	1	Numeric character string	0,1

EDI TRANSMISSION:

No standards set yet.

Item Title: **SOCIAL SECURITY NUMBER**

Item Number: **3**

Description**:**   The social security number (SSN) of the deceased.

Source of Information:

    Preferred Source: Decedent's SSN card
    Other Acceptable Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

ASK THE INFORMANT:

    What was _____'s social security number? Do you have a document with you from
    which I may copy the number?

Enter the nine-digit SSN of the decedent. Read the number back to the informant or check
against the document from which it is being copied before moving to the next item.

If the informant does not know the decedent's SSN at the time of the interview, leave the item
blank until the informant can supply the number.

If the decedent has no social security number, for example, a recent immigrant or a person from
a foreign country visiting the United States, print or type "None."

If the deceased's social security number is not known, print or type "Unknown."

If the decedent's SSN is not obtainable, print or type "Not Obtainable."

FOR AN ELECTRONIC RECORD:

EDR Developer

*The screen should show space for entering the 9-digit SSN, as well as the following menu of
choices:*

5/4/2001

☐　　**None (decedent has no SSN)**
☐　　**Pending (informant does not know at this time)**
☐　　**Unknown (informant does not know the SSN)**
☐　　**Not Obtainable (no informant, unknown body)**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
SSN	Social Security Number	000000000-999999999	
SSN_MVR	Companion missing value variable	N	None
		P	Pending
		U	Unknown
		X	Not obtainable

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

The record must contain a valid nine-digit SSN or a response of "N," "U," or "X" from the menu. The record cannot be filed or printed if "pending" is selected from the menu. If any menu choice other than "pending" is made, the database field for the SSN is set to all zeros.

State edits of data file prior to NCHS transmission

Paper records filed with this field blank or with an illegal entry are queried at the time of filing. If no response to query or query yields an invalid number, choose the "Unknown" response from the menu and set the SSN database field to all zeros.

The record must have a nine digit SSN (000000000 is a valid entry).

STATE FILE CONSIDERATIONS

In addition to the field for the SSN, States can choose to maintain the companion variable recommended for quality control purposes to record the menu selections. Otherwise, the companion variable is just used in the editing process before the record is accepted by the State

NCHS TRANSMISSION FILE

VARIABLES:

NAME	**LENGTH**	**TYPE**	**VALUES**
SSN	9	Numeric character string	000000000-999999999

EDI TRANSMISSION:

No standards set yet.

5/4/2001

Item Title: **DECEDENT'S AGE**

Item Number: **4a, 4b, 4c**

Description: Decedent's age at the time of death.

4a.   Age in years at the decedent's last birthday.
4b.   Age in months and/or days of a decedent greater than one day old but less than one year old.
4c.   Age in hours and/or minutes of a decedent less than one day old.

Source of Information:

Preferred Source: Informant
Other Acceptable Sources: Medical Records (infant's)
                               Medical Examiner or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

ASK THE INFORMANT: How old was _____ when he/she passed away?

Include the units supplied by the informant such as years, months, days, etc.

Enter the data as given to you by the informant in the appropriate box in the units they provide (except weeks): years, months, days, hours, minutes.

If the age is in years, enter into item 4a.
If the age is in months, enter into item 4b.
If the age is in weeks, ask if informant knows the age in days?
If the age is in hours, enter into item 4c.
If the age is in minutes, enter into item 4c.

Multiple entries may be permitted by the State but are not required.

Drop all fractions, such as "75 and a half years;" record as "75."

5/4/2001

For responses such as "almost 4 months," enter "3" in the Months box.

For responses such as "about 90 years," enter "90" in the Years box.

If the informant gives an unspecified answer such as several hours or a few minutes, ASK—can you give me a number? If a range is given, use the lower number. If the informant cannot give a number, be sure to identify the units if possible by printing or typing a "?" in the appropriate unit box.

If the informant does not know and cannot obtain the age, record "Unknown" in box 4a.

FOR AN ELECTRONIC RECORD:

EDR Developer

For the electronic record, date of birth and date of death (temporary) will be asked first so edits can be done on this item when the record is completed.

The EDR entry screen should be set up to record the numeric value of the age and then the appropriate units chosen from a menu list. There needs to be a box to check if a numeric value cannot be entered. When this box is checked, the unit menu should appear.

When the age of decedent is to be completed, the following instructions should appear:

Drop all fractions, such as "75 and a half years;" record as 75.

For responses such as "almost 4 months," enter "3" in the Months box.

For responses such as "about 90 years," enter "90" in the Years box.

If the informant gives an unspecified answer such as several hours or a few minutes, ASK—"Can you give me a number?" If a range is given, use the lower number.

UNITS OF AGE
(Please select one category)
☐ **Years**
☐ **Months**
☐ **Weeks**
☐ **Days**
☐ **Hours**
☐ **Minutes**
☐ **Unknown**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
AGETYPE	Age unit	1	Years
		2	Months
		3	Weeks
		4	Days
		5	Hours
		6	Minutes
		9	Unknown (Not classifiable)
AGE	Age	001-125, 999	If AGETYPE=1
		001-011, 999	If AGETYPE=2
		001-004, 999	If AGETYPE=3
		001-027, 999	If AGETYPE=4
		001-023, 999	If AGETYPE=5
		001-059, 999	If AGETYPE=6
		999	If AGETYPE=9
AGE_BYPASS	Edit flag	0	Off (edit passed)
		1	On (edit failed, data queried, and verified; AGETYPE must equal "1" for the bypass to be set to "On.")

EDITS:

Before the record is transmitted to the State

The edits below can be performed at the time of data entry if the EDR already contains the date of death, or if the State allows the funeral director to enter the date of death or a "temporary" date of death. The edits will have to be repeated at the State once the record is accepted.

Whenever an edit fails at data entry, a query screen will appear asking that the discrepancy be resolved.

1. *Date of Death must be later (greater) than or equal to Date of Birth. If not, record needs to be queried (record not accepted).*
2. *If Date of Death minus Date of Birth indicates that the entered age is off by more than one year, query (record not accepted).*
3. *If AGETYPE is 4 (days) and AGE > 27 days after query to verify entry, then divide by 28, truncate and change AGETYPE to 2.*
4. *If AGETYPE is 2 (months) and AGE>11 after query to verify entry, then divide by 12, truncate and change AGETYPE to 1.*

5/4/2001

5. *If AGETYPE is 3 (weeks), always convert to days. Multiply by 7 and change AGETYPE to 4 (days). If converted number is > 27, then see instruction number 12.*
6. *If AGETYPE is 5 (hours) and AGE>23 after query to verify entry, then divide by 24, truncate and change AGETYPE to 4.*
7. *If AGETYPE is 6 (minutes) and AGE>59 after query to verify entry, then divide by 60, truncate and change AGETYPE to 5.*
8. *If AGETYPE is unknown and Date of Death minus Date of Birth is greater than 1 year, then set AGETYPE to 1, otherwise set to 9 (unknown.)*
9. *If Date of Birth and Date of Death are the same, age units must be hours or minutes. If age unit is days, AGE must equal 1. If not days, hours or minutes, query. For an EDR, dates and AGETYPE would appear immediately on a query screen. Date of Death may have been accidentally recorded in the Date of Birth item.*
10. *If Date of Birth and Date of Death are one day apart then infant must be one day of age or less: AGE=1 and AGETYPE= 4, or AGE =01-23 and AGETYPE=5, or AGE=01-59 and AGETYPE=6.*
11. *If Date of Birth and Date of Death are between 2 and 27 days apart, then AGETYPE must be 4 and AGE=02-27.*
12. *If Date of Birth and Date of Death are between 28 and 364 days apart, then AGETYPE must be 2 and AGE=01-11.*
13. *If AGE is 12 or less, check Date of Death minus Date of Birth to be sure the correct AGETYPE is recorded. For an EDR, dates and AGETYPE would appear immediately on a query screen for verification.*
14. *IF AGETYPE is 1 (years) and AGE is >125 and the Date of Birth field is recorded as "unknown," then, for an electronic record, the query should occur at the funeral director's level where a screen should appear that asks the funeral director to verify. If verified, the edit bypass field is set to "ON". Records received electronically with age verified as greater than 125 are accepted.*
15. *If AGE is greater than 125 years and calculated age matches recorded age, the edit bypass variable is set to "ON." If calculated age does not match recorded age, query screen should appear and a resolution obtained from the funeral director prior to submission of the EDR. For the paper record, State would have to query.*

STATE FILE CONSIDERATIONS:

States may elect to use separate fields for each box on the certificate. The informant's exact response, including, for example, "3 months and 5 days" can be printed electronically for issuing copies.

The following fields are suggested:

Item 4a.
AGE1 (years)

Item 4b.
AGE2 (months)

AGE3 (weeks)
AGE4 (days)

Item 4c.
AGE5 (hours)
AGE6 (minutes)

States may consider having AGE fields of approximately 15 characters to record string responses such as "a few hours" or "several minutes." These responses would then be retained for certification use if States choose to print certificates from the file. (These types of responses should be discouraged.) These fields will be converted as described below for submission to NCHS.

Several -- 999
A couple of-- 999
A few -- 999
Unknown -- 999

If States elect not to use multiple fields, then they would have one field for the numeric value AGE, one field for the units AGETYPE, and one field for the age edit bypass AGE_BYPASS.

If States elect to have separate AGE and AGETYPE fields for each box 4a, 4b, 4c, then only the highest (lowest number) AGETYPE should be transmitted and the others ignored. For example: If item 4b. is 3 months 12 days, ignore the days and transmit only the AGE =3 and the AGETYPE=2.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
AGETYPE	1	Numeric character string	1, 2, 4, 5, 6, 9
AGE	3	Integer numeric string	001-125, 999
AGE_BYPASS	1	Numeric character string	0, 1

EDI TRANSMISSION:

No standards set yet.

Item Titles: **DATE OF BIRTH**

Item Number: **5**

Description: The decedent's date of birth

Source of Information:

Preferred Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

Print or type the month (spelled out), day, and four-digit year of birth.

If the Date of Birth is unknown, then print "Unknown." If part of Date of Birth is unknown, then enter the known parts and leave the remaining parts blank.

For example, for a person who is born in 1913 but the month and day are not known, print or type 1913. Or if the month and year are known and the day not known, print or type February, "blank," 1913.

FOR AN ELECTRONIC RECORD:

EDR Developer

Decedent's Date of Birth is to be asked before the funeral director enters the age of the decedent.

The Date of Birth item is a three-field entry with the month, day, and year entered in separate fields.

Funeral director should be able to leave any individual entry field of the date blank and tab to the next entry field.

When the Decedent's Date of Birth item is to be completed, the following message should appear at the top of the screen and remain on the screen until the last field of the date is completed:

> **If only part of the decedent's date of birth is known, enter the known parts and leave the unknown parts blank.**

5/4/2001

If the date of birth of the decedent is not known at this time, leave blank.

When the month of birth is to be entered, the following message should appear:

Enter the FULL name of the month the decedent was born.

Any fields left blank will be filled with 9's.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITIONS</u>
DOB_YR	Year of Birth	4 digit year	4 digit year ≤ Year of Death
		9999	Unknown
DOB_MO	Month of Birth	January	
		February	
		March	
		April	
		May	
		June	
		July	
		August	
		September	
		October	
		November	
		December	
		All 9's	Unknown
DOB_DY	Day of Birth	01-31 (based on DOB-MO)	January 1-31
			February 1-29
			March 1-31
			April 1-30
			May 1-31
			June 1-30
			July 1-31
			August 1-31
			September 1-30
			October 1-31
			November 1-30
			December 1-31
		99	Unknown

AGE_CALC   Calculated age   000-125
                                 999   Unknown

EDITS:

Before the record is transmitted to the State

EDR

Misspellings are to be automatically corrected.

All blank fields will be converted to all 9's.

If month is February and day = 29, year of birth should be a leap year. If not, an error message should appear and ask that the date be corrected.

Date is compared to temporary date of death already entered or entered by funeral director for the EDR. For the electronic record, the comparison with the date of death is done at the time of data entry. Date of birth must be the same as or prior to date of death. If not, an error message appears with the two dates and indicates that one of the dates must be in error.

Age is calculated using date of birth (completed dates only) and temporary date of death for the EDR. Calculated age will be compared to entered age.

If the field is blank at the time the record is submitted, a query screen for the item is needed. An option to check a box indicating the date is unknown or space to enter a date at this time is needed.

If the "Unknown" box is checked, the record is accepted for filing.

Paper Records

For paper records, the same edits are applied. Edits failed after re-entry through the edit screens will result in a listing of items to be queried and the item will be given a pending query status.

STATE FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date, it is recommended that the date be entered and stored as three separate fields.

If states elect to use a database system that has an option of storing dates as "date type variables," then the system must meet the criteria listed under transmission standards.

TRANSLATIONS

States will need to translate the written months into numeric values as follows:

January	01
February	02
March	03
April	04
May	05
June	06
July	07
August	08
September	09
October	10
November	11
December	12

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
DOB_YR	4	Numeric character string or "date type"	4 digit year <=Year of Death, 9999
DOB_MO	2	Numeric character string or "date type"	01-12, 99
DOB_DY	2	Numeric character string or "date type"	01-31 (based on month), 99

EDI TRANSMISSION

HL 7 Transmission standards will be followed. This is a time date stamped standard in the following format:

YYYY[MM[DD]]

Year must be fully represented with four digits.

Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

Item Title: **BIRTHPLACE (CITY AND STATE OR FOREIGN COUNTRY)**

Item Number: **6**

Description: Geographic location of the decedent's place of birth.

Source of Information:

Preferred Source: Informant

INSTRUCTIONS

FOR PAPER AND ELECTRONIC RECORDS:

Funeral Director

ASK THE INFORMANT: Was _____born in the United States?

If "Yes,"

ASK: What State or U.S. territory was _____ born in?

Record the name of the State.   If not known, record "Unknown."

ASK: What is the name of the city where_____was born?

Record the name of the city. If not known, then record "Unknown" for city.

If "No,"

ASK: What country was _____born in?

Record the name of the country.

If respondent indicates both a city and country like Paris, France, record both the name of the country and city. If the informant does not know the country or city but knows it is not the USA, record "Unknown."

Skip to the next item.

5/4/2001

FOR A PAPER RECORD:

Funeral Director

Print or type the responses in the appropriate spaces on the certificate. Print or type only the information available. If the decedent was born in the USA, print or type only the city and State. Do not print or type "USA." If the State is known but not the city, just print the State name. If both the city and State are not known, print or type "Unknown." If the decedent was not born in the USA and the country is not known, print or type "Unknown."

FOR AN ELECTRONIC RECORD:

EDR Developer

There should be individual entry spaces for city of birth, State of birth, and country of birth. The series of items to be captured with instructions is suggested below.

- **If born in the USA, enter USA. If not born in the USA, enter the name of the country of birth.**

- **If the informant does not know the country, but knows the decedent was not born in the USA, enter "Unknown."**

    Country of Decedent's Birth _____

If the decedent was not born in the USA, skip this next field.

- **If the State is not known, enter "Unknown."**

    State of Decedent's Birth_____

- **If the name of the city where the decedent was born is not known, enter "Unknown."**

    City of Decedent's Birth_____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
BPLACE_CNT	Country of birth	See Appendix B	
BPLACE_CTY	City of birth	See Appendix C	
BPLACE_ST	State of birth	See Appendix D	
LBPLACE_CNT	Country of birth	Literal	
LBPLACE_CTY	City of birth	Literal	
LBPLACE_ST	State of birth	Literal	

The city variables are for State use only.

EDITS:

Before the record is transmitted to the State

- *If country is known and is not USA, then State field must be blank.*
- *If country is "Unknown," city may be known.*
- *If country is USA, city and State may be "Unknown."*
- *If city is known and State is unknown and cannot be determined, State field should be "Unknown."*

STATE FILE CONSIDERATIONS

States may also opt to retain coded fields as well as the literal entries. If coded fields are maintained as well, there are CDC-HISSB standards that should be used. Literals for countries should be assigned codes using FIPS 10-4 (related to ISO table 3166) (two character alphabetic codes for nations).

NCHS TRANSMISSION FILE

VARIABLES:

Note: NCHS will now accept all country codes.

NAMES	LENGTH	TYPE	VALUES
BPLACE_CNT	2	Alpha character string	Appendix B
BPLACE_ST	2	Numeric character string	Appendix D

EDI TRANSMISSION:

No standards set yet.

Item Titles: **DECEDENT'S RESIDENCE**
                STATE
                COUNTY
                CITY OR TOWN
                STREET AND NUMBER
                APT. NO.
                ZIP CODE
                INSIDE CITY LIMITS?

Item Numbers: **7a., 7b., 7c., 7d., 7e., 7f., 7g.**

Description: The geographic location of the decedent's residence.

Source of Information:

     Preferred Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

This is the residence address (i.e., place where the decedent actually resided), not the postal address. Do not enter addresses that are post office boxes or rural route numbers. Get the building number and "street" name.

The place of residence is not necessarily the same as "home state" or "legal residence." Never enter a temporary residence such as one used during a visit, business trip, or vacation. Place of residence during a tour of military duty or during attendance at college is considered permanent and should be entered as the place of residence. If the decedent had been living in a facility where an individual usually resides for a long period of time, such as a group home, mental institution, nursing home, penitentiary, or hospital for the chronically ill, report the location of that facility in item 7.

If the decedent was an infant who never resided at home, the place of residence is that of the parent(s) or legal guardian. Never use an acute care hospital's location as the place of residence for any infant.

If the "street" name has a direction as a prefix, enter the prefix in front of the street name. If the "street name" has a direction after the name, enter the direction after the name.

Examples: South Main Street. Enter the name as South Main.
Walker Street NW. Enter the name as Walker NW.

Item 7d. Street and Number
Item 7e. Apt. No.

ASK THE INFORMANT: What is the "street" address of _____'s residence?

Print the number of building, then the name of any pre-direction, then the "street name," then the street designator along with any post-directions.

Examples of the street designator are words like Street, Avenue, Road, Circle, Court etc.

Print the apartment or room number.

Item 7c. City or Town
Item 7g. Inside City Limits

ASK THE INFORMANT: What is the name of the city, town or other place of residence where _____ resided?

Print the name of the city, town, or other place of residence _____.

ASK THE INFORMANT: Is _____'s place of residence inside the city or town limits? (check the appropriate box). If it is not known if the residence is inside the city or town limits, print "Unknown" in the space.

Inside City Limits
☐ Yes
☐ No

Item 7f. Zip Code

ASK THE INFORMANT: What is the zip code of _____'s residence?

Print the Zip code_____.

The 9 digit Zip code is preferred over the 5 digit Zip code.

If the decedent was not a resident of the USA or its territories, leave this item blank.

Item 7a. Residence-State

This item is where the USA States and territories and the provinces of Canada are recorded.

ASK THE INFORMANT: What is the State, territory or province where _____ resided?

Print the USA State or territory.
If a Canadian province or territory, print the name of the province or territory followed by " / Canada."

Item 7b. County

ASK: What is the name of the county where_____resided?

If the decedent resided in any country other than the United States and its territories, leave this item blank.

Print the name of the County_____.

Item (not on certificate) Country of Residence

If the decedent was obviously a resident of the US or its territories, <u>do not ask</u> the country of residence. Usually the informant will indicate a foreign country or US territory of residence early in the interview.

If the decedent was not a resident of the US and the decedent's country of residence has not been mentioned then,

ASK: What is the name of the country where _____ resided?

Print the name of the country or US territory item 7a.(State). If the informant does not know the name of the country, leave the item blank.

FOR AN ELECTRONIC RECORD:

EDR Developer

The collection of the decedent's residence data should be set up to maximize the efficient use of GIS coding technology in order to improve the geographic allocation of these events.   Two options for recording the street address are provided. In the second option, the street address will have to be parsed to separate out the pre- and post-directionals. Space in the State data files for the extended zip codes, latitude and longitude coordinates and centroids will have to be allowed.

PREFERRED METHOD

If the "street" name has a direction as a prefix, enter the prefix in the space labeled "pre-directional." If the "street" name has a direction after the name, enter the suffix in the space labeled "post-directional."

> Examples: South Main Street. Enter the name as Main and the pre-
> direction as South.
> Walker Street NW. Enter the name as Walker and NW in the   post-
> directional space.

If there are no pre- or post-directions, leave these spaces blank.

OPTIONAL ACCEPTABLE METHOD

If the "street" name has a direction as a prefix, enter the prefix in front of the street name. If the "street" name has a direction after the name, enter the direction after the name.

> Examples: South Main Street. Enter the name as South Main.
> Walker Street NW. Enter the name as Walker NW.

While all the residence fields are being completed, the following general instructions should be on the screen.

- **Residence of the decedent is the place the decedent actually resided.**
- **Never enter a temporary residence such as one used during a visit, business trip, or vacation.**
- **Place of residence during a tour of military duty or attendance at college should be entered as the place of residence.**
- **For decedents who lived in a group home, nursing home, mental institution, penitentiary, or hospital for the chronically ill, report the location of the facility as the place of residence.**
- **If the decedent was an infant who never resided at home, the place of residence is that of the parents.**

Data entry should be set up in the order identified below. When each item is to be completed specific instructions will appear. These are listed below.

1. Building number_____
2. Pre-directional_____
3. Name of the "street"_____
4. Street designator _____
5. Post-directional _____
6. Apartment or room number_____
7. Name of the city, town, or other place of residence_____
8. Is decedent's place of residence inside the city or town limits?

☐   Yes
☐   No
☐   Unknown

9.   Zip code of the above address (9 digits)_____
10.   County of the decedent's residence_____
11.   State, U.S. Territory, or Canadian Province of the residence _____
12.   Decedent's country of residence_____

When item 1 "Building number" is to be completed, the following instructions should appear:

Enter the building number assigned to the decedent's residence.
Do not record a R.R. number or P.O. box.
If the number is unknown, enter "Unknown."

When item 2 "Pre-directional" is to be completed, the following instructions should appear.

If the "street" name has a direction as a prefix, enter the prefix in the space labeled "pre-directional."

       Example: South Main Street. Enter the pre-
               direction as South.

If there is no pre-direction, leave this space blank.

When item 3 "Street name" is to be completed, the following instructions should appear.

Enter the "street" name of the decedent's residence.
Do not enter a R.R. number.

When item 4 "Street designator" is to be completed, the following instruction should appear.

Enter the street designator.
Examples of the street designators are words like Street, Avenue, Road, Circle, Court etc.

When item 5 "Post directional" is to be completed, the following instructions should appear.

If the "street" name has a direction after the name, enter the suffix in the space labeled "post-directional."

       Example: Walker Street NW. Enter NW in the post-directional space.

If there is no post-direction, leave this space blank.

When item 6 "Apartment number" is to be completed, the following instruction should appear.

If there is no apartment or room number associated with this residence, leave the item blank.

When item 7 "Name of city or town" is to be completed, no instructions are needed.

When item 8 "Inside city limits" is to be completed, the following instruction should appear.

If uncertain if the residence is inside the city or town limits, check the "Unknown" box.

When item 9 "Zip code" is to be completed, the following instruction should appear.

If only the 5 digit Zip code is known, report that.

If the decedent was not a resident of the USA or its territories, leave this item blank.

When item 10 "County of residence" is to be completed, the following instruction should appear.

If the decedent resided in any country other than the United States or its Territories, leave this item blank.

When item 11 "State, U.S. territory or Canadian province" is to be completed, the following instructions should appear.

Enter the USA State or territory.

If the decedent resided in a Canadian province or territory, print the name of the province or territory.

When item 12 "Country of residence" is to be completed, the following instructions should appear.

If the decedent was a resident of the USA, leave this item blank.

If the decedent was not a resident of the USA, enter the name of the decedent's country of residence.

If the decedent's country of residence is unknown, enter "Unknown."

OR (Alternate Format)

1 Building_____
2. Name of the "street"_____
3. Street designator _____

4. Apartment or room number_____
5. Name of the city, town, or other place of residence_____
6. Is decedent's place of residence inside the city or town limits?

      ☐   Yes
      ☐   No
      ☐   Unknown

7. Zip code of the above address (9 digits)_____
8. County of the decedent's residence_____
9. State, U.S. Territory, or Canadian Province of the residence _____
10. Decedent's country of residence_____

Instructions for the optional method

When item 1 "Building" is to be completed, the following instructions should appear.

> **Enter the street number assigned to the decedent's residence.**
> **Do not record a R.R. number or P.O. box.**
> **If the number is unknown, enter "Unknown."**

When item 2 "Name of street" is to be completed, the following instructions should appear.

> **Enter the "street" name of the decedent's residence.**
> **Do not enter a R.R. number.**
>
> **If the "street" name has a direction as a prefix, enter the prefix in front of the street name. If the "street" name has a direction after the name, enter the direction after the name.**

>   **Examples: South Main Street. Enter the name as South Main.**
>   **Walker Street NW. Enter the name as Walker NW.**

When item 3 "Street designator" is to be completed, the following instruction should appear.

> **Enter the street designator.**
> **Examples of the street designator are words like Street, Avenue, Road, Circle, Court, etc.**

When item 4 "Apartment number" is to be completed, the following instruction should appear.

> **If there is no apartment or room number associated with this residence, leave the item blank.**

When item 5 "City or town" is to be completed, no instructions are needed.

5/4/2001

When item 6 "Inside city limits" is to be completed, the following instruction should appear.

If uncertain if the residence is inside the city or town limits, check the "Unknown" box.

When item 7 "Zip code" is to be completed, the following instruction should appear.

If only the 5 digit Zip code is known, report that.

If the decedent was not a resident of the USA or its territories, leave this item blank.

When item 8 "County of residence" is to be completed, the following instruction should appear.

If the decedent resided in any country other than the United States or its territories, leave this item blank.

When item 9 "State, U.S. territory, or Canadian province" is to be completed, the following instructions should appear.

Enter the USA State or territory.

If the decedent resided in a Canadian province or territory, print the name of the province or territory.

When item 10 "Country of residence" is to be completed, the following instructions should appear.

If the decedent was a resident of the USA, leave this item blank.

If the decedent was not a resident of the USA, enter the name of the decedent's country of residence.

If the decedent's country of residence is not known, enter "Unknown."

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITIONS
STNUM	Street number		
PREDIR	Pre-directional		
STNAME	Street name		
STDESIG	Street designator		
POSTDIR	Post-directional		
UNUM	Unit or apartment number		
CITY	City or Town name		
CITYC	City or Town code	See Appendix C	

ZIP   Zip Code
COUNTY County
COUNTYC County code
STATE   State or Province   See Appendix D
COUNTRY Country
COUNTRYC Country code   See Appendix B
LIMITS   Inside city limits   Y   Yes
                 N   No
                 U   Unknown

TRANSLATIONS
Response Mapping (examples)

__Response__	__Maps to values__
Country Name	FIPS 10-4 (Appendix B)
State or Province Name	FIPS (Appendix D)
City/Town Name	Maps to names in FIPS 55 table
County Name	Maps to FIPS 6-4

EDITS:

Before the record is transmitted to the State

1. *If country is known and is not USA, then city, county and State fields may be blank. Do not run any table look-ups for city, county or State.*

2. *If country is unknown, then city, county and State may also be unknown. Do not run any table look-ups for city, county or State.*

3. *If country is USA, run table look-ups for State, county, and city. State, County and City may be "Unknown."*

4. *Check city name in FIPS 55 name table. If not in table and if it is an electronic record, a message should appear asking that the name be checked. Enter revised data; if edit fails again, code city to "Unknown." Keep the literals.   For a paper record, automatically reject and follow-up with the funeral director. If rejected a second time, code city to "Unknown."*

5. *Code county using FIPS 6-4. If not in table, then reject record for review and/or follow-up. If electronic record, reject at funeral home. Error message should indicate that the county not*

5/4/2001

*listed, please check and re-enter. Record cannot be printed or filed without a county entered.
"Unknown" is an acceptable entry for found, unidentified bodies, and foreign residents.*

STATE FILE CONSIDERATIONS

It is recommended that States keep this information in as detailed a format as possible. See the recommended electronic format below. For data collected on paper records, keying instructions need to reflect the detail of the electronic record. If States elect to use GIS on these data then space in the State data file will be needed for the derived variables of latitude, longitude, centroid and extended 9 digit zip code.

ELECTRONIC RECORD

For the purpose of recording and printing certified copies from the electronic file and for geo-coding the record, it is recommended that the address field be separated into fields as described below. These fields generally correspond to the CDC-HISSB recommendations. However, the field lengths do not correspond to the recommendations because the literal entries need to be captured. If a State desires, the literal entries can be transposed to abbreviations for purposes of compacting the file using standard abbreviations as recommended in the HISSB standards. States may wish to collect zip code to the 9th digit when known rather than just 5 digits.

Suggested field names are:

DESCRIPTION	NAME	LENGTH
Street number	STNUM	10
Pre-directional	PREDIR	10
Street name	STNAME	28
Street designator	STDESIG	10
Post-directional	POSTDIR	10
Unit or apartment number	UNUM	7
City or Town name	CITY	28
Zip Code	ZIP	9
County	COUNTY	28
State or Province	STATE	28
Country	COUNTRY	28

States may also opt to retain coded fields as well as the literal entries. If coded fields are maintained as well, there are HISSB and ISO standards that should be used. Literals for countries should be assigned codes using FIPS 10-4 using the two character alphabetic codes for nations. County codes are from FIPS 6-4 (3 digit county codes). City of residence should be transmitted to NCHS using FIPS 55 names. State and Province codes will be two character FIPS codes for the USA and its territories and 2 character codes for the provinces and territories of Canada.

NCHS TRANSMISSION FILE

States that elect to use a GIS coding process prior to submission of data to NCHS shall replace the codes for city, town, or other place as well as county codes with those derived from the GIS process.

NAMES		LENGTH	TYPE	VALUES
CITYC	City or Town code	5	Numeric character string	Appendix C
COUNTY	County	3	Numeric character string	
STATE	State or Province	2	Numeric character string	Appendix D
COUNTRYC	Country	2	Alpha character string	Appendix B

EDI TRANSMISSION:

No standards set yet.

Item Title: **MARITAL STATUS**

Item Number: **9**

Description: Current marital status of the decedent**.**

Source of Information:

Preferred Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

ASK THE INFORMANT: What was the marital status of the decedent at the time of death?
Note: Just because a spouse may be the informant does not preclude the possibility of married
but separated.

- "Annulled and not remarried" and "never previously married" are considered "Never
  Married."
- "Annulled and not remarried" and "married previously" are classified as how the
  previous marriage terminated (Widowed, Divorced).
- "Common Law marriage" is considered "Married."
- "Indian marriage" is considered "Married."

Check one and only one category on the certificate.

☐ Married
☐ Married but separated
☐ Widowed (and not remarried)
☐ Divorced (and not remarried)
☐ Never Married
☐ Unknown

5/4/2001

FOR AN ELECTRONIC RECORD:

EDR Developer

The marital status item is completed by selecting one response from the menu.

Menu for Marital Status of the Decedent

- ☐ Married
- ☐ Married but separated
- ☐ Widowed (and not remarried)
- ☐ Divorced (and not remarried)
- ☐ Never Married
- ☐ Unknown
- ☐ Not Obtainable

Instructions to be included in the help function.

Information not available:

- Check the "Not obtainable" box only when there is no knowledgeable informant or other source for this information.
- Check the "Unknown" box only when there is an informant, and the informant does not know the marital status of the decedent.

Special Cases
- "Annulled, not remarried" and "never previously married" - select "Never Married."
- "Annulled, not remarried" and "married previously" - select the item reflecting how the previous marriage terminated ("Widowed," "Divorced").
- "Common Law marriage" - select "Married."
- "Indian marriage" - select "Married."

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
MARITAL	Marital status	M	Married
		A	Married but separated
		W	Widowed
		D	Divorced
		S	Never married
		N	Not obtainable
		U	Unknown

5/4/2001

NAME	DESCRIPTION	VALUES	DEFINITION
MARITAL _BYPASS	Edit Flag	0	OFF (edit passed)
		1	ON (edit failed, data queried and verified)
		2	ON (edit failed, data queried but not verified)
		3	ON (edit failed, review needed)
		4	ON (edit failed, query needed) (paper only)

EDITS:

Before the record is transmitted to the State

Electronic record must contain one of the valid responses indicated above. If the funeral director skips this item for completion later, a query screen will appear before the record can be printed or filed. The query screen is the same as the initial entry screen. The header for the screen however will indicate that one of the categories below must be selected before the record can be printed or filed. The item cannot be left blank.

In addition, if the age of the decedent is less than 12 years of age (using calculated age) and marital status is any response but "never married," a message appears asking the funeral director to check the marital status.

This automated edit asks the funeral director to verify or change the marital status. If a change to this item is made, the edit is immediately rerun. If the edit still fails, the record is accepted.

The age item is not checked because both the recorded age and calculated age have already been checked for consistency; thus, it is very unlikely that an incorrect age would cause the edit to fail.

5/4/2001

SAMPLE ERROR MESSAGE AND QUERY SCREENS

The information entered indicates that the decedent was less than 12 years of age and marital status was _____. Please review the information and complete the screen below.

The decedent's marital status was recorded as: _____

☐ Incorrect
☐ Correct
☐ Not able to verify

If the incorrect box is checked, the marital status menu appears and a message asks that a choice be made from the menu.

Edit bypass flags

ELECTRONIC RECORD

The edit bypass flag default is OFF-0. When the initial edit is run and the data pass the edit, the bypass flag remains at OFF-0.

When the edit fails, the edit bypass flag is set to ON-3. An error message and query screen then appears. The edit bypass flag is then reset to a value determined by the response to the query (see detail below).

If the "Correct" box is checked, the edit bypass flag is reset to ON-1 (edit failed, data verified).

If the "Not able to verify" box is checked, the edit bypass flag is set to ON-2 (queried but not verified).

If the "Incorrect" box is checked, the edit is run with the new data. If the edit fails, the bypass flag is set to ON-1 (queried and verified). If the edit passes, the flag is set to OFF-0.

PAPER RECORD

Records filed with marital status blank or with an improper entry are queried. If there is no response to the query, assign the "Unknown" code.

The edit bypass flag default is OFF-0. When the initial edit is run and the data pass the edit, the bypass flag remains OFF-0.

When the edit fails, the edit bypass flag is set to ON-3. Data from the paper record must then be re-keyed. If re-keyed data pass the edit, the bypass flag is reset to OFF-0. If re-keyed data fail the edit, the bypass flag is reset to ON-4, flagging the record to query the funeral director. If the state does not query the funeral director the flag remains at ON-4.

In addition, for paper records, if age is less than 12 years of age (use calculated age) and marital status is any response but "never married," the funeral director should be queried to check the Date of Birth and Marital Status field entries for possible errors.

If the funeral director verifies that the data are correct, the bypass flag is reset to ON-1. If there is no response to the funeral director query, the bypass flag is reset to ON-2. If the funeral director's response to the query still fails the edit, the bypass flag is set to ON-1.

STATE FILE CONSIDERATIONS

States may want to keep these MARITAL STATUS codes N and U for monitoring funeral directors' responses to this item.

NCHS TRANSMISSION FILE

For NCHS transmission, values of N (not obtainable) and U (unknown) are combined into one value X for "Not Classifiable."

The value of "3" for the MARITAL_BYPASS variable used for processing edits is not an allowable value when transmitting data to NCHS.

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
MARITAL	1	Alpha character string	M, A, W, D, S, X
MARITAL _BYPASS	1	Numeric character string	0,1,2,4

EDI TRANSMISSION:

No standards set yet.

Item Title: **PLACE OF DEATH**

Item Number: **14**

Description: The physical location where the decedent died.

Source of Information:

    Preferred Source: Funeral Director

    Other Acceptable Sources: Pronouncer
                                 Certifying Physician
                                 Medical Examiner or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

The place where death is pronounced should be considered the place where death occurred.

If the place of death is not known and the body was found in the State, enter the place where the body was found as the place of death.

If death occurred in a hospital, then check one of the boxes in the space titled IF DEATH OCCURRED IN A HOSPITAL.

If death did not occur in a hospital, check one of the boxes in the space titled IF DEATH OCCURRED SOMEWHERE OTHER THAN A HOSPITAL. If the "Other (Specify)" box is checked, print or type the place where the death occurred on the line next to the "Other (Specify)" box.

FOR AN ELECTRONIC RECORD:

EDR developer

The place death occurred is to be chosen from a menu list partitioned on if death occurred in a hospital or elsewhere. The following instruction should appear when this item is to be completed.

The place where death is pronounced should be considered the place where death occurred.

5/4/2001

If the place of death is not known and the body was found in the State, enter the place where the body was found as the place of death.

Place of death menu:

    Death occurred in a hospital.

        ☐   **Inpatient**
        ☐   **Emergency Room /Outpatient**
        ☐   **DOA (dead on arrival)**

    Death did not occur in a hospital.

        ☐   **Decedent's home**
        ☐   **Hospice facility**
        ☐   **Nursing home/Long term care facility**
        ☐   **Other (specify)**

If the "Other (Specify)" box is checked, then a place to record the other place of death should appear.

    Please enter the place where the death occurred.

    Place of death: _____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DPLACE	Place of death	1	Inpatient
		2	Emergency room/Outpatient
		3	Dead on arrival
		4	Decedent's home
		5	Hospice facility
		6	Nursing home/Long term care facility
		7	Other

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

*Electronic record must contain one of the valid responses indicated above.
The item cannot be left blank. If blank, a query screen (same as entry screen) appears.
The record cannot be filed or printed with this item blank.*

PAPER RECORD

*Paper records filed with this field blank are queried. If no response to query, the code for
"Other (Specify)" is assigned.*

State edits of data file prior to NCHS transmission

Must be a valid code (see below).

Item cannot be blank.

STATE FILE CONSIDERATIONS

States will have to record literal entries in order to print certified copies from the electronic file.
States may elect to code the "Other (Specify)" entries for statistical purposes.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
DPLACE	1	Numeric character string	1, 2, 3, 4, 5, 6, 7

EDI TRANSMISSION:

No standards set yet.

Item Titles: **FACILITY NAME
CITY, TOWN, AND ZIP CODE
COUNTY**

Item Numbers: **15, 16, 17**

Description: The geographic location where the death occurred.

Source of Information:

Preferred Source: Funeral Director
Other Acceptable Sources: Pronouncer
Certifying Physician
Medical Examiner or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director, Pronouncer, Certifying Physician, Medical Examiner or Coroner

For item 15, print or type the name of the institution where the decedent died. If the decedent did not die in an institution, print or type the street and number of the building (if at a building) where the decedent died.

For item 16, print or type the name of the city where the institution is located or of the address given in item 15, then print or type the Zip code.

For item 17, print or type the name of the county in which the institution or address given in item 15 is located.

FOR AN ELECTRONIC RECORD:

EDR Developer

The EDR system should contain a master table of all institutions where a death might occur. This would include at a minimum, hospitals, nursing homes, long term care facilities, and hospice facilities.

When the name of an institution is entered, the entry should be compared to the master table, and if found, the required information for items 16 and 17 should be entered automatically and then move to the next item.

5/4/2001

Data entry should be set up in the order below. When each item is to be completed a screen with specific instructions should appear. The instructions are listed below:

Instructions for item 15 (Name of the institution).

- **If the death occurred in an institution, enter the name of the institution.**

- **If death did not occur in an institution, leave blank and tab to item 16.**

If an institution is named, the master table is examined to obtain the information for items 16 and 17. If the institution is located, the information is entered automatically and the next item to be completed appears.

If the institution is not located in the table, the following message should appear:

- **The name of the institution entered above is not listed in the master table of institutions, please complete the items below.**

- **To have the institution added to the table, contact_____at _____.**

Items to be entered for non-institution deaths or deaths where the institution is not in the master table.

1. **Building number_____**
2. **Name of the "street"_____**
3. **"Street" designator _____**
4. **Name of the city or town _____**
5. **Zip code of the above address_____**
6. **County of the above address_____**

Instructions for items 15,16, and 17 (non-institution deaths)
These instructions should appear when the specific item is being completed.

Instructions for "Building number"

- **Leave this blank if decedent did not die in a building.**

Instructions for "Name of street"

- **If the "street" name has a direction as a prefix, enter the prefix in front of the street name. If the "street" name has a direction after the name, enter the direction after the name.**

    Examples: South Main Street. Enter the name as South Main.
    Walker Street NW. Enter the name as Walker NW.

Instructions for "Street designator"

- **Examples of the street designator are words like Street, Avenue, Road, Circle, Court etc.**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DINSTI	Institution	Literal	
DSTNUM	Street number		
DSTNAME	Street name		
DSTDESIG	Street designator		
DNAME	City or town name	See Appendix C	
DZIP9	Zip code		
DCOUNTY	County		

TRANSLATIONS
Response mapping (examples)

Response	Maps to values
City/Town Name	Maps to names in FIPS 55 table
County Name	Maps to FIPS 6-4

EDITS:

Before the record is transmitted to the State

The name of the county is compared to a list of counties for the State where the death occurred to identify and correct spelling errors.

If the county is not listed, an error message will appear that reads:

The county where death occurred is not a valid county for this State.

Please re-enter the county _____

STATE FILE CONSIDERATIONS

It is recommended that States keep this information in as detailed a format as possible. See the recommended electronic format below. For data collected on paper records keying instructions

need to reflect the detail of the electronic record. States may elect to code cities and institutions for quality control and statistical purposes. Coding of counties is required. States should keep the literal entries in order to be able to print certified copies. Data fields of sufficient size should be reserved for this purpose. States may wish to collect zip code to the 9th digit when known rather than just 5 digits. See suggested list below

DESCRIPTION	NAME	LENGTH
Institution	DINSTI	30
Street number	DSTNUM	10
Street name	DSTNAME	50
Street designator	DSTDESIG	10
City or town name	DNAME	28
Zip code	DZIP9	9
County	DCOUNTY	28

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
COD	3	Numeric character string	FIPS 6-4, 999

EDI TRANSMISSION:

No standards set yet.

5/4/2001

Item Title: **METHOD OF DISPOSITION**

Item Number: **18**

Description: Method of final disposition of the deceased
                (if known)

Source of Information:

    Preferred Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

Response is based on wishes of the next of kin or informant.

Check the appropriate box (see below).
If the box labeled "Other" is chosen, print the method of disposition.

    ☐   Burial
    ☐   Cremation
    ☐   Donation
    ☐   Entombment
    ☐   Removal from State
    ☐   Other (Specify)_____

FOR AN ELECTRONIC RECORD:

EDR Developer

Method of disposition is to be selected from the menu below.

Method of Disposition

☐ **Burial**
☐ **Cremation**
☐ **Donation**
☐ **Entombment**
☐ **Removal from State**
☐ **Other**

If the "other" response is selected, a place to enter the "other" method of disposition appears.

Please describe the other type of disposition.

Other (specify)_____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DISP	Method of disposition	B	Burial
		C	Cremation
		D	Donation
		E	Entombment
		R	Removal from State
		O	Other
		X	Unknown
DISPL	Method of disposition	alpha characters	Literal entry for "other specify" response

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

Electronic record must contain one of the responses indicated above. If not, query screen appears before record can be printed or filed. Same screen as entry screen appears and

5/4/2001

indicates that one of the categories below must be selected before the record can be printed or filed.

PAPER RECORD

Records filed with this field blank are queried. If no response to query, assign the "Unknown" code.

State edits of data file prior to NCHS transmission

Must be a valid code (see below). If multiple methods are reported, a single response should be selected for transmission to NCHS. Order of preference from most preferred to least is as follows: burial, cremation, donation, entombment, removal from State, other.

STATE FILE CONSIDERATIONS

States may opt to electronically record the "Other (specify)" methods. This will be needed if certified copies are to be issued from the electronic file. It is recommended that this be a 15-character field and each of the methods be stored as literals, then coded to "other" for transmission.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
DISP	1	Alpha character string	B, C, D, E, R, O, X

EDI TRANSMISSION:

No standards set yet.

Item Titles: **DATE PRONOUNCED DEAD**
                 TIME PRONOUNCED DEAD

Item Numbers: **24 & 25**

Descriptions: Month, day and year decedent was pronounced dead.
                 Hour and minute decedent was pronounced dead.

Source of Information**:**

   Preferred Source: Pronouncer
   Other Acceptable Source: Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Pronouncer, Certifying Physician, Medical Examiner, or Coroner

If the facility uses a separate pronouncer or other person to indicate that death has taken place
with another person more familiar with the case completing the remainder of the medical portion
of the death certificate, the pronouncer reports the pronounced date and time. In all other cases,
the certifying physician, medical examiner, or coroner reports the date and time the person is
pronounced dead.

Print or type the month (spelled out), day, and four-digit year of death.

Print or type the hour and minute of death using a 24-hour clock.

FOR AN ELECTRONIC RECORD:

EDR Developer

*If the facility uses a separate pronouncer or other person to indicate that death has taken place
with another person more familiar with the case completing the remainder of the medical portion
of the death certificate, the pronouncer reports the pronounced date and time. In all other cases,
the certifying physician, medical examiner, or coroner reports the date and time the person is
pronounced dead.*

*It is proposed that Date Pronounced Dead be a three-field entry with the month, day, and year
entered in separate fields. There would be no drop down menu from which to select year, month
or day, and no defaults.*

5/4/2001

Date Pronounced Dead

Month pronounced dead _____

When the month is to be entered, the following instruction should appear.

Enter the FULL name of the month.

Day pronounced dead_____
Year pronounced dead_____

It is proposed that the Time Pronounced Dead be a single-field entry. There would be no drop down menu to select hours and minutes.

Hour and minute pronounced dead_____

When the hour is to be entered, the following prompt should appear:

Use a 24-hour clock.

PROCESSING VARIABLES:

NAME	**DESCRIPTION**	**VALUES**	**DEFINITION**
PD_YR	Year pronounced dead	4-digit year	must be less than or equal to system year.
PD_MO	Month pronounced dead	January February March April May June July August September October November December	
PD_DY	Day pronounced dead	01-31 01-29 01-31 01-30	If January If February If March If April

01-31	If May
01-30	If June
01-31	If July
01-31	If August
01-30	If September
01-31	If October
01-30	If November
01-31	If December

TD   Time pronounced dead   0000-2359
                                              or
                                          0001-2400 (see edits)

EDITS:

Before the record is transmitted to the State

**Please note: Pronouncement may occur well after the actual date and time of death but cannot occur before death. Edits will check that pronounced dates and times do not precede actual dates and times.

Some facilities may use a 0001-2400 range in lieu of the 0000-2359 range. The only difference between these systems is in how the beginning of the new day, midnight (or 12:00 am using the 12-hour clock) to 59 seconds after midnight (12:00:59 am) is represented. For medical facilities, the commonly used sequence is:
2359 (11:59 pm)
0000 (12:00 am)
0001 (12:01 am)

However, for the military (but not necessarily military medical institutions) the sequence is:
2359 (11:59 pm)
2400 (12:00 am)
0001 (12:01 am).

The new day begins at 0000 or 2400 (midnight) (0001=1 minute after midnight, etc.).

Date and time fields cannot be left blank.

Misspellings will be automatically corrected.

If month is February and day is 29, year should be a leap year.

5/4/2001

If edits fail for any of the above edits, all the date fields are displayed and the error identified. The pronouncer, certifying physician, medical examiner, or coroner must correct the error before the record can be filed or printed.

For comparative purposes, a new field consisting of a combination of the three date fields should be formed to compare the actual or presumed Date of Death field (when completed) with the Date Pronounced Dead. Use the format YYYYMMDD. If the number for pronounced date is greater than or equal to the actual or presumed date, the edit passes. If not, the edit fails. If the numbers are equal, a similar comparison needs to be done for the Time Pronounced Dead and the actual or presumed Time of Death. If the time pronounced dead is greater (later) than or equal to the actual or presumed time of death, the edit passes. If not, the edit fails.

If the pronouncer is different from the certifying physician, medical examiner, or coroner, provide a mechanism for feedback to the pronouncer.

States need to edit year field to be sure it is the correct year for the file being submitted. States also need to edit the date fields to be sure they are earlier than or equal to the date the record was registered or filed.

SAMPLE ERROR MESSAGE AND QUERY SCREEN

One of the date entries is incorrect or inconsistent with other date entries. Please review and make any necessary changes.

Item Number	Field	Entry	Comments
29	Month	September	
	Day	31	day is greater than 30
29	Year	2003	
30	Time	1748	
24	Month	September	
24	Day	30	
24	Year	2002	Pronounced dead prior to actual death
25	Time	1748	

STATE DATA FILE CONSIDERATIONS

Although the paper document does not have separate fields for each element of the date or time, it is recommended that the date be entered and stored as three separate fields, and the time be entered and stored as a single separate field.

If states elect to use a database system that has an option of storing dates as "date type variables," the system must meet the criteria listed under transmission.

5/4/2001

TRANSLATIONS:

States will need to translate the written months into numeric values as follows:

<div align="center">

January   01
February   02
March   03
April   04
May   05
June   06
July   07
August   08
September   09
October   10
November   11
December   12

</div>

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
PD_YR	4	Numeric character string	4-digit year
PD_MO	2	Numeric character string	01-12
PD_DY	2	Numeric character string	01-31
TD	4	Numeric character string	0000-2400

EDI TRANSMISSION:

HL 7 transmission standards will be followed. This is a time and date stamped standard in the following format:

YYYY[MM[DD[HH[mm]]]]

The year must be fully represented with four digits.

Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

5/4/2001

Item Titles: **DATE OF DEATH**
                    TIME OF DEATH

Item Number: **29 & 30**

Description: Actual or presumed Date of Death
                    Actual or presumed Time of Death

Source of Information:

                    Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Physician/Coroner

Print or type the month (spelled out), day, and four-digit year of death.

Print or type the hour and minute of death using a 24-hour clock.

If the exact date or time of death is unknown, enter the approximate date. Estimates may be provided with "Approx." placed before the time.

FOR AN ELECTRONIC RECORD:

EDR Developer

It is proposed that Date of Death be a four-field entry with the month, day, and year being entered in separate fields. An additional field to indicate any modifiers to the date of death such as "presumed" would be completed prior to entering the date of death. There will be no menus for selecting the year, month, or day of death.

List of modifiers for the actual or presumed date of death

> **Please select the appropriate modifier for the date of death about to be entered.**

> ☐   **Actual date of death**
> ☐   **Approximate date of death**
> ☐   **Presumed date of death**
> ☐   **Court determined date of death**

5/4/2001

Month of death _____
Day of death _____
Year of death _____

It is proposed that the Time of Death be a two-field entry with hour and minutes entered in one field and a modifier in the other field.

List of modifiers for the actual or presumed time of death

Please select the appropriate modifier for the time of death about to be entered.

☐   **Actual time of death**
☐   **Approximate time of death**
☐   **Presumed time of death**
☐   **Court determined time of death**
☐   **Unknown time of death**

If "Unknown" is selected, skip to the next item and leave the hour and minute field blank.

Hour and minute of death (Use a 24-hour clock) _____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DOD_YR	Year of death	4-digit year	must be less than or equal to system year.
DOD_MO	Month of death	January February March April May June July August September October November December	
DOD_DY	Day of death	01-31 01-29	If January If February

5/4/2001

01-31	If March
01-30	If April
01-31	If May
01-30	If June
01-31	If July
01-31	If August
01-30	If September
01-31	If October
01-30	If November
01-31	If December

TOD   Time of death   0000-2359
      or
0001-2400
9999   Unknown

EDITS:

Before the record is transmitted to the State

Some facilities may use a 0001-2400 range in lieu of the 0000-2359 range. The only difference between these systems is in how the beginning of the new day, midnight (or 12:00 am using the 12-hour clock) to 59 seconds after midnight (12:00:59 am) is represented. For medical facilities, the commonly used sequence is:
2359 (11:59 pm)
0000 (12:00 am)
0001 (12:01 am)

However, for the military (but not necessarily military medical institutions) the sequence is:
2359 (11:59 pm)
2400 (12:00 am)
0001 (12:01 am).

Entry	**Values**
Month	January, February, March, April May, June, July, August, September October, November, December
Day	January 1-31 February 1-29 March 1-31 April 1-30 May 1-31 June 1-30 July 1-31

August   1-31
September 1-30
October   1-31
November 1-30
December 1-31

Year   Must be less than or equal to system year

Time   0000-2400

If any of the edits fail, an error screen will appear that shows all the date and time information entered and a comment on invalid entries.   These errors must be corrected before the record can be submitted or printed.

The modifier field must be completed. If blank, an error screen shows the entry screen with a sentence that reads, "Please select one of these choices."

Misspellings will be automatically corrected.

If month is February and day is 29, year must be a leap year.

States need to edit the year field to be sure it is the correct year for the file being submitted.

States also need to compare the Date of Death fields to be sure it is earlier or equal to the date the record was registered or filed.

STATE FILE CONSIDERATIONS:

While the paper document does not have separate fields for each element of the date and time, it is recommended that the date be entered and stored as four separate fields. The fourth field is for the modifier described above. Similarly, the Time of Death would be kept in two fields; the second is for the modifier. Modifiers are to be kept only at the State level for legal purposes and for the purpose of issuing certified copies from the electronic file.

If States elect to use a database system that has an option of storing dates as "date type variables," then the system must meet the criteria listed under transmission standards.

5/4/2001

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
DOD_YR	4	Numeric character string or "date type"	4 digit year
DOD_MO	2	Numeric character string or "date type"	01-12
DOD_DY	2	Numeric character string or "date type"	0-31 (based on MO)
TOD	4	Numeric character string or "date type"	0000-2400, 9999

TRANSLATIONS:

States will need to translate the written months into numeric values as follows:

January	01
February	02
March	03
April	04
May	05
June	06
July	07
August	08
September	09
October	10
November	11
December	12

EDI TRANSMISSION:

 HL 7 Transmission standards will be followed.

Format ------   YYYY[MM[DD[HH[mm]]]]

Year must be fully represented with four digits.
Software that stores dates as "date type" must be year 2000 compliant and capable of producing
the date in the YYYY….. format and capable of producing messages in the
HL7 EDI format.

5/4/2001

Item Title: **CAUSE OF DEATH**

Item Number: **32**

Description: Causes of death are diseases, abnormalities, injuries, or poisonings that contributed directly or indirectly to death.

Source of Information:

Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Physician/Medical Examiner/Coroner

The cause-of-death section consists of two parts. Part I is for reporting a chain of events leading directly to death, with the immediate cause of death (the final disease, injury, or complication directly causing death) on line a and the underlying cause of death (the disease or injury that initiated the chain of events that led directly and inevitably to death) on the lowest used line. Part II is for reporting all other significant diseases, conditions, or injuries that contributed to death but which did not result in the underlying cause of death given in Part I. The cause-of-death information should be your best medical opinion. A condition can be listed as "probable" even if it has not been definitively diagnosed.

It provides important personal information about the decedent and about the circumstances and cause of death. Information on cause of death is important to the family to bring closure, peace-of-mind, and to document the exact cause of death. Cause of death is also used for medical and epidemiological research on disease etiology and evaluating the effectiveness of diagnostic and therapeutic techniques. It is a measure of health status at local, state, national, and international levels.

The medical examiner/coroner investigates deaths that are unexpected, unexplained, or if an injury or poisoning was involved. State laws provide guidelines for when a medical examiner/coroner must be notified. In the case of deaths known or suspected to have resulted from injury or poisoning, report the death to the medical examiner/coroner as required by State law. The medical examiner/coroner will either complete the cause-of-death section of the death certificate or waive that responsibility. If the medical examiner/coroner does not accept the case, then the certifier will need to complete the cause-of-death section.

General instructions for completing cause of death

(For an expanded set of instructions, refer to the State vital statistics office, the tutorial at http://www.theNAME.org, handbooks and other resources at http://www.cdc.gov/nchs/about/major/dvs/handbk.htm, or NCHS, Room 820, 6525 Belcrest Road, Hyattsville, Maryland 20782).

♦ Cause-of-death information should be your best medical opinion.

♦ List only one condition per line in Part I.

♦ Each condition in Part I should cause the condition above it.

♦ Abbreviations and parentheses should be avoided in reporting causes of death.

♦ Provide the best estimate of the interval between the presumed onset of each condition and death.

♦ The original death certificate should be amended if additional medical information or autopsy findings become available that would change the cause of death originally reported.

♦ For deaths caused by injury or poisoning, complete only if the medical examiner or coroner instructs you to do so.

♦ The terminal event (e.g., cardiac arrest or respiratory arrest) should not be used. You should report the causes of the terminal event (e.g., cardiac arrest due to coronary artery atherosclerosis or cardiac arrest due to blunt impact to chest).

♦ If an organ system failure such as congestive heart failure, hepatic failure, renal failure, or respiratory failure is listed as a cause of death, always report its etiology on the line(s) beneath it (e.g., renal failure due to Type I diabetes mellitus).

♦ When indicating neoplasms as a cause of death, include the following: 1) primary site or that the primary site is unknown, 2) benign or malignant, 3) cell type or that the cell type is unknown, 4) grade of neoplasm, and 5) part or lobe of organ affected (e.g., primary well-differentiated squamous cell carcinoma, lung, left upper lobe).

♦ Always report the fatal injury (e.g., stab wound of chest), the trauma (e.g., transection of subclavian vein), and impairment of function (e.g., air embolism).

♦ In Part II, report all diseases or conditions contributing to death that were not reported in the chain of events in Part I and that did not result in the underlying cause of death.

♦ If two or more possible sequences resulted in death, or if two conditions seem to have added together, report in Part I the one that, in your opinion, most directly caused death. Report in Part II the other conditions or diseases.

FOR AN ELECTRONIC RECORD:

EDR Developer

When the cause-of-death section of the electronic death certificate is opened or accessed, the first screen to appear should read as follows:

A death certificate is a permanent record of the fact of death of an individual. It provides important personal information about the decedent and about the circumstances and cause of death. Information on cause of death is important to the family to bring closure, peace-of-mind, and to document the exact cause of death. Cause of death is also used for medical and epidemiological research on disease etiology and evaluating the effectiveness of

diagnostic and therapeutic techniques. It is a measure of health status at local, state, national, and international levels.

Physician's responsibility

The physician's primary responsibility in completing the cause-of-death section is to report to the best of his or her knowledge, based upon available information, the causal chain that led to the death. The causal chain should begin with the cause that was closest to the time of death and work backwards to the initiating condition which is called the underlying cause of death. For example, the physician might report a death for which staphylococcus pneumonia occurs closest to the time of death; however the physician also reports that the pneumonia is due to carcinoma metastatic to both lungs, which in turn, is due to poorly differentiated adenocarcinoma, unknown primary site.

Medical examiner/coroner's responsibility

The medical examiner/coroner investigates deaths that are unexpected, unexplained, or if an injury or poisoning was involved. State laws provide guidelines for when a medical examiner/coroner must be notified. In the case of deaths known or suspected to have resulted from injury or poisoning, report the death to the medical examiner/coroner as required by State law. The medical examiner/coroner will either complete the cause-of-death section of the death certificate or waive that responsibility. If the medical examiner/coroner does not accept the case, then the certifier will need to complete the cause-of-death section.

General instructions for completing cause of death (For an expanded set of instructions, click on help)

♦   Cause-of-death information should be your best medical opinion.
♦   List only one condition per line in Part I.
♦   Each condition in Part I should cause the condition above it.
♦   Abbreviations and parentheses should be avoided in reporting causes of death.
♦   Provide the best estimate of the interval between the presumed onset of each condition and death.
♦   The original death certificate should be amended if additional medical information or autopsy findings become available that would change the cause of death originally reported.
♦   For deaths caused by injury or poisoning, complete only if the medical examiner or coroner instructs you to do so.
♦   The terminal event (e.g., cardiac arrest or respiratory arrest) should not be used. You should report the causes of the terminal event (e.g., cardiac arrest due to coronary artery atherosclerosis or cardiac arrest due to blunt impact to chest).
♦   If an organ system failure such as congestive heart failure, hepatic failure, renal failure, or respiratory failure is listed as a cause of death, always report its etiology on the line(s) beneath it (e.g., renal failure due to Type I diabetes mellitus).

♦ **When indicating neoplasms as a cause of death, include the following: 1) primary site or that the primary site is unknown, 2) benign or malignant, 3) cell type or that the cell type is unknown, 4) grade of neoplasm, and 5) part or lobe of organ affected (e.g., primary well-differentiated squamous cell carcinoma, lung, left upper lobe).**

♦ **Always report the fatal injury (e.g., stab wound of chest), the trauma (e.g., transection of subclavian vein), and impairment of function (e.g., air embolism).**

♦ **In Part II, report all diseases or conditions contributing to death that were not reported in the chain of events in Part I and that did not result in the underlying cause of death.**

♦ **If two or more possible sequences resulted in death, or if two conditions seem to have added together, report in Part I the one that, in your opinion, most directly caused death. Report in Part II the other conditions or diseases.**

♦ **If you have never completed a death certificate or need a refresher, click on Help for additional assistance and examples of properly completed cause-of-death statements.**

On medical examiner (ME), coroner, and physician entry screens of the EDC, it is imperative that the physician viewing the screen be able to see, at minimum, the same prompts and formatting as those physicians using the paper version of the 2003 revision of the U.S. Standard Certificate of Death (as shown below). These medical certifiers need to be able to see that they will be completing both Parts I and II of the death certificate. The physicians completing cause of death must enter medical conditions using their own terminology (PICK LISTS FOR CAUSES ARE NOT ALLOWED). The EDC provides the opportunity to provide additional space and instructions; pick lists and other techniques may be used for fields other than cause of death.

CAUSE OF DEATH (See instructions and examples)	Approximate Interval: Onset to death
32. PART I. Enter the chain of events - - diseases, injuries, or complications- - that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE.	
IMMEDIATE CAUSE (Final disease or condition resulting in death) - - - - - - - - - - - -> a.	
Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST — Due to (or as a consequence of): b.	
Due to (or as a consequence of): c.	
Due to (or as a consequence of): d.	
PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I.	

Each page should include a context sensitive progress bar (or mouse-over or some alternative pop-up) that provides an instruction or definition as the cursor moves from item to item. When

the cursor moves to the cause-of-death boxes representing Part I of the standard certificate of death, the progress bar or other alternative should have a status message that says:

Provide a description of the sequence of causes resulting in death in these entry boxes, starting with the most recent condition. Click on Help for examples and assistance.

When cursor is on the entry box representing information collected on Part II of the certificate of death, the status message on the progress bar should read:

Report conditions that pre-existed or co-existed and contributed to death, but did not result in the cause reported in the lowest line used in Part I, as reported above. Click on Help for examples and assistance.

When the cursor is on an entry box for the "approximate interval between onset and death," the status message on the progress bar should read:

Time interval between presumed onset of the condition and the date of death. Click on Help for additional information.

INFORMATION THAT SHOULD BE INCLUDED IN THE HELP FUNCTION

The following shows the structure and content of the Help Section. When the user clicks on Help from an item, the Help screen that appears should show the section of Help that is relevant to that item as well as the index of the Help Section that would permit them to navigate elsewhere within the Help. This will provide assistance for the item in question as well as letting them know that the additional topics are addressed in Help.

[Certifier- Guidance on getting to help should be prominent on every screen; within the help section, the index should be prominent:]

Index of Help Section:
Introduction to completing a cause-of-death statement
Examples of properly completed cause-of-death statements
Detailed instructions
Glossary of terms
Possible solutions to common problems in death certification
      Uncertainty
      Elderly deaths
      Infant deaths
      Avoid ambiguity
References
Approximate interval between onset and death

Introduction to completing a cause-of-death statement

A death certificate is a permanent record of an individual's death. One purpose of the death certificate is to obtain a simple description of the sequence or process leading to death rather than a record describing all medical conditions present at death.

Causes of death on the death certificate represent a medical opinion that might vary among individual physicians. In signing the death certificate, the physician, medical examiner, or coroner certifies that, in his/her medical opinion, the individual died from the reported causes of death. The certifier's opinion and confidence in that opinion are based upon his/her training, knowledge of medicine, available medical history, symptoms, diagnostic tests, and available autopsy results for the decedent. Even if extensive information is available to the certifier, causes of death may be difficult to determine, so the certifier may indicate uncertainty by qualifying the causes on the death certificate.

Cause-of-death data is important for surveillance, research, design of public health and medical interventions, and funding decisions for research and development. The death certificate is also a legal document used in settling estates.

Examples of properly completed cause-of-death statements

The following are examples of properly completed death certificates:

CAUSE OF DEATH (See instructions and examples)	Approximate Interval: Onset to death
32. PART I. Enter the <u>chain of events</u> - - diseases, injuries, or complications- - that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE.	

IMMEDIATE CAUSE (Final disease or condition resulting in death) - - - - - - - - - ->	a. Rupture of myocardium	Minutes
	Due to (or as a consequence of):	
Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST	b. Acute myocardial infarction	6 days
	Due to (or as a consequence of):	
	c. Coronary artery thrombosis	6 days
	Due to (or as a consequence of):	
	d. Atherosclerotic coronary artery disease	7 years

PART II. Enter other <u>significant conditions contributing to death</u> but not resulting in the underlying cause given in PART I.	33. WAS AN AUTOPSY PERFORMED?
Diabetes, Chronic obstructive pulmonary disease, smoking	■ Yes ☐ No
	34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ■ Yes ☐ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH?	36. IF FEMALE	37. MANNER OF DEATH
■ Yes ☐ Probably ☐ No ☐ Unknown	■ Not pregnant within past year ☐ Pregnant at time of death ☐ Not pregnant, but pregnant within 42 days of death ☐ Not pregnant, but pregnant 43 days to 1 year before death ☐ Unknown if pregnant within the past year	■ Natural ☐ Homicide ☐ Accident ☐ Pending investigation ☐ Suicide ☐ Could not be determined

5/4/2001

CAUSE OF DEATH (See instructions and examples)

32. PART I. Enter the chain of events - - diseases, injuries, or complications-- that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE.

Approximate Interval: Onset to death

IMMEDIATE CAUSE (Final disease or condition resulting in death) - - - - - - - - - ->

a. Acute renal failure — 5 days

Due to (or as a consequence of):

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST

b. Hyperosmolar nonketotic coma — 8 days

Due to (or as a consequence of):

c. Non-insulin-dependent diabetes mellitus — 15 years

Due to (or as a consequence of):

d.

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I.

Hypertension, Atherosclerotic coronary artery disease

33. WAS AN AUTOPSY PERFORMED?
■ Yes ☐ No

34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ☐ Yes ■ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH?
☐ Yes ☐ Probably
■ No ☐ Unknown

36. IF FEMALE
☐ Not pregnant within past year
☐ Pregnant at time of death
☐ Not pregnant, but pregnant within 42 days of death
☐ Not pregnant, but pregnant 43 days to 1 year before death
☐ Unknown if pregnant within the past year

37. MANNER OF DEATH
■ Natural ☐ Homicide
☐ Accident ☐ Pending investigation
☐ Suicide ☐ Could not be determined

CAUSE OF DEATH (See instructions and examples)

32. PART I. Enter the chain of events - - diseases, injuries, or complications-- that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE.

Approximate Interval: Onset to death

IMMEDIATE CAUSE (Final disease or condition resulting in death) - - - - - - - - - ->

a. Carbon monoxide poisoning — Unknown

Due to (or as a consequence of):

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST

b. Inhalation of automobile exhaust fumes

Due to (or as a consequence of):

c.

Due to (or as a consequence of):

d.

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I.

Cancer of stomach

33. WAS AN AUTOPSY PERFORMED?
■ Yes ☐ No

34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ■ Yes ☐ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH?
☐ Yes ☐ Probably
☐ No ■ Unknown

36. IF FEMALE
☐ Not pregnant within past year
☐ Pregnant at time of death
☐ Not pregnant, but pregnant within 42 days of death
☐ Not pregnant, but pregnant 43 days to 1 year before death
☐ Unknown if pregnant within the past year

37. MANNER OF DEATH
☐ Natural ☐ Homicide
☐ Accident ☐ Pending investigation
■ Suicide ☐ Could not be determined

38. DATE OF INJURY (Mo/Day/Yr) (Spell Month)

August 15, 2003

39. TIME OF INJURY

Unknown

40. PLACE OF INJURY (e.g., Decedent's home; construction site; restaurant; wooded area)

In own home- garage

41. INJURY AT WORK?
☐ Yes ■ No

42. LOCATION OF INJURY: State: Missouri   City or Town: Alexandria

Street & Number: 898 Sylvan Road   Apartment No: Zip Code: 63141-2314

43. DESCRIBE HOW INJURY OCCURRED:

Inhaled exhaust from automobile enclosed in garage

44. IF TRANSPORTATION INJURY, SPECIFY:
☐ Driver/Operator
☐ Passenger
☐ Pedestrian
☐ Other (Specify):

5/4/2001

CAUSE OF DEATH (See instructions and examples)

32. PART I. Enter the chain of events - - diseases, injuries, or complications- - that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE.

Approximate Interval: Onset to death

IMMEDIATE CAUSE (Final disease or condition resulting in death) - - - - - - - - - ->

a. Cardiac tamponade — **15 minutes**

Due to (or as a consequence of):

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST

b. Perforation of heart — **20 minutes**

Due to (or as a consequence of):

c. Shotgun wound to thorax — **20 minutes**

Due to (or as a consequence of):

d.

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I.

33. WAS AN AUTOPSY PERFORMED?
■ Yes ☐ No

34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ■ Yes ☐ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH?
☐ Yes ☐ Probably
■ No ☐ Unknown

36. IF FEMALE
☐ Not pregnant within past year
☐ Pregnant at time of death
☐ Not pregnant, but pregnant within 42 days of death
☐ Not pregnant, but pregnant 43 days to 1 year before death
☐ Unknown if pregnant within the past year

37. MANNER OF DEATH
☐ Natural ■ Homicide
☐ Accident ☐ Pending investigation
☐ Suicide ☐ Could not be determined

38. DATE OF INJURY (Mo/Day/Yr) (Spell Month)
August 20, 2003

39. TIME OF INJURY
Approx. 2100

40. PLACE OF INJURY (e.g., Decedent's home; construction site; restaurant; wooded area)
Neighbor's home

41. INJURY AT WORK?
☐ Yes ■ No

42. LOCATION OF INJURY: State: Alabama   City or Town: Columbus

Street & Number: 3129 Discus Avenue   Apartment No: Zip Code: 35487-0002

43. DESCRIBE HOW INJURY OCCURRED:

Shot by another person using a shotgun

44. IF TRANSPORTATION INJURY, SPECIFY:
☐ Driver/Operator
☐ Passenger
☐ Pedestrian
☐ Other (Specify):

5/4/2001

CAUSE OF DEATH (See instructions and examples)		Approximate Interval: Onset to death
32. PART I. Enter the chain of events - - diseases, injuries, or complications- - that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE.		

IMMEDIATE CAUSE (Final disease or condition resulting in death) - - - - - - - - - ->	a. Aspiration pneumonia	2 days
Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST	Due to (or as a consequence of): b. Complications of coma	7 weeks
	Due to (or as a consequence of): c. Blunt force injuries	7 weeks
	Due to (or as a consequence of): d. Motor vehicle accident	7 weeks

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I.	33. WAS AN AUTOPSY PERFORMED? ■ Yes ☐ No
	34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? ■ Yes ☐ No

35. DID TOBACCO USE CONTRIBUTE TO DEATH? ☐ Yes ☐ Probably ☐ No ■ Unknown	36. IF FEMALE ☐ Not pregnant within past year ☐ Pregnant at time of death ☐ Not pregnant, but pregnant within 42 days of death ☐ Not pregnant, but pregnant 43 days to 1 year before death ☐ Unknown if pregnant within the past year	37. MANNER OF DEATH ☐ Natural ☐ Homicide ■ Accident ☐ Pending investigation ☐ Suicide ☐ Could not be determined

38. DATE OF INJURY (Mo/Day/Yr) (Spell Month) December 13, 2003	39. TIME OF INJURY Approx. 1700	40. PLACE OF INJURY (e.g., Decedent's home; construction site; restaurant; wooded area) road side near state highway	41. INJURY AT WORK? ☐ Yes ■ No

42. LOCATION OF INJURY: State: California   City or Town: Foggy
Street & Number: mile marker 17 on state route 46A   Apartment No: Zip Code:

43. DESCRIBE HOW INJURY OCCURRED: Decedent driver of van, ran off road into tree	44. IF TRANSPORTATION INJURY, SPECIFY: ■ Driver/Operator ☐ Passenger ☐ Pedestrian ☐ Other (Specify):

Detailed instructions

- ♦ **Cause-of-death information should be your best medical opinion.**
- ♦ **List only one condition per line in Part I. Additional lines may be added if necessary.**
- ♦ **Each condition in Part I should cause the condition above it.**
- ♦ **Abbreviations and parentheses should be avoided in reporting causes of death.**
- ♦ **Provide the best estimate of the interval between the presumed onset of each condition and death. The terms "approximately" or "unknown" may be used. Do not leave the interval blank; if unknown, indicate that it is unknown.**
- ♦ **The original death certificate should be amended by the certifying physician (if additional medical information or autopsy findings become available that would change the cause of death originally reported) by immediately reporting the revised cause of death to the State Vital Records Office.**
- ♦ **Report each disease, abnormality, injury, or poisoning that you believe adversely affected the decedent. A condition can be listed as "probable" even if it has not been definitively diagnosed.**

♦ A complete sequence should be reported in Part I that explains why the patient died. The sequence may be an etiological or pathological sequence as well as a sequence in which an earlier condition is believed to have prepared the way for a subsequent cause by damage to tissues or impairment of function.

♦ No entry is necessary on lines (b), (c), and (d) if a single cause of death reported on line (a) describes completely the train of events resulting in death.

♦ If two or more possible sequences resulted in death, report in Part I the one that, in your opinion, most directly caused death. Report in Part II the other conditions or diseases.

♦ A specific cause of death should be reported in the last entry in Part I so there is no ambiguity about the etiology of this cause.

♦ Conditions or diseases in Part II should contribute to death but not result in the last entry in Part I.

♦ Mechanistic terminal events such as respiratory arrest, asystole, cardiac arrest, cardio-respiratory arrest, ventricular fibrillation, and electromechanical dissociation should not be the only condition included in the cause-of-death statement and are unlikely to be the underlying cause.

♦ Always report an etiology for organ system failure such as congestive heart failure, hepatic failure, renal failure, or respiratory failure on the lines beneath it.

♦ If, in your opinion, the use of alcohol, tobacco, other substance by the decedent, or a recent pregnancy or injury caused or contributed to death, then this condition should be reported.

♦ A primary site and/or histological type should be specified for neoplasms or specify that site and type are unknown.

♦ Deaths known or suspected as having been caused by injury or poisoning should be reported to the medical examiner or coroner, and you will only need to complete the death certificate if the medical examiner or coroner instructs you to do so.

♦ For deaths resulting from injuries, always report the fatal injury event, the trauma, and the impairment of function.

Glossary of terms

Causes of death: The causes of death to be entered on the medical certificate of cause of death are all those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries.

Underlying cause of death: the disease or injury that initiated the chain of morbid events that led directly to death.

Immediate cause of death: the disease, injury, or complication directly causing death. The interval between this condition and death is equal to or less than that between any other condition and death in Part I.

Intermediate cause of death: a disease, injury, or complication that occurs between the onset of the underlying cause and the immediate cause of death in the sequence of conditions reported in Part I of the death certificate.

Due to (or as a consequence of): apply to etiological or pathological sequences as well as to sequences in which an earlier condition is believed to have prepared the way for a subsequent cause by damage to tissues or impairment of function

Possible solutions to common problems in death certification

Uncertainty:

Often several acceptable ways of writing a cause-of-death statement exist. Optimally, a certifier will be able to provide a simple description of the process leading to death that is etiologically clear and to be confident that this is the correct sequence of causes. However, realistically, description of the process is sometimes difficult because the certifier is not certain.

In this case, the certifier should think through the causes about which he/she is confident and what possible etiologies could have resulted in these conditions. The certifier should select the causes that are suspected to have been involved and use words such as "probable" or "presumed" to indicate that the description provided is not completely certain. If the initiating condition reported on the death certificate could have arisen from a pre-existing condition but the certifier cannot determine the etiology, he/she should state that the etiology is unknown, undetermined, or unspecified, so it is clear that the certifier did not have enough information to provide even a qualified etiology. Reporting a cause of death as unknown should be a last resort.

Elderly deaths:

When preparing a cause-of-death statement for an elderly decedent, the causes should present a clear and distinct etiological sequence, if possible. Causes of death on the death certificate should not include terms such as senescence, old age, infirmity, and advanced age because they have little value for public health or medical research. Age is recorded elsewhere on the death certificate. When malnutrition is involved, the certifier should consider if other medical conditions could have led to malnutrition.

The death certificate and the classification of diseases are not designed to capture multiple organ/system failure. When a number of conditions or multiple organ/system failure resulted in death, the physician, medical examiner, or coroner should choose a single

sequence to describe the process leading to death and list the other conditions in Part II of the certification section. "Multiple system failure" could be included as an "other significant condition" but also specify the systems involved to ensure that the information is captured. In other instances, conditions listed in Part II of the death certificate may include causes that resulted from the underlying cause but which did not fit into the sequence resulting in death.

If any potentially lethal medical conditions are known but cannot be cited as part of the sequence leading to death, they should be listed as other significant conditions.

If the certifier cannot determine a descriptive sequence of causes of death despite carefully considering all information available, the medical examiner or coroner should be consulted about conducting an investigation or providing assistance in completing the medical certification.

Infant deaths:

When preparing a cause-of-death statement for an infant death, the causes should present a clear and distinct etiological sequence, if possible. Causes of death on the death certificate should not include terms such as prematurity without explaining the etiology because they have little value for public health or medical research.

When a number of conditions or multiple organ/system failure resulted in death, the physician, medical examiner, or coroner should choose a single sequence to describe the process leading to death and list the other conditions in Part II of the certification section. "Multiple system failure" could be included as an "other significant condition" but also specify the systems involved to ensure that the information is captured. Maternal conditions may have initiated or affected the sequence that resulted in an infant death. These maternal conditions should be reported in the cause-of-death statement in addition to the infant causes (e.g., Hyaline membrane disease due to prematurity, 28 weeks due to placental abruption due to blunt trauma to mother's abdomen).

When SIDS is suspected, a complete investigation should be conducted, typically by a medical examiner or coroner. If the infant is under 1 year of age, no cause of death is determined after scene investigation, clinical history is reviewed, and a complete autopsy is performed, then the death can be reported as Sudden infant death syndrome.

Avoid ambiguity:

Most certifiers will find themselves, at some point, in the circumstance in which they are unable to provide a simple description of the process of death. In this situation, the certifier should try to provide a clear sequence, qualify the causes about which he/she is uncertain, and be able to explain the certification chosen.

When conditions such as the following are reported, information about the etiology should be reported if possible:

Abscess

Abdominal hemorrhage

Acute myocardial infarction

Adhesions

Adult respiratory distress syndrome

Altered mental status

Anemia

Anoxia

Anoxic encephalopathy

Arrhythmia

Ascites

Aspiration

Atrial fibrillation

Bacteremia

Bedridden

Biliary obstruction

Bowel obstruction

Brain injury

Brain stem herniation

Carcinogenesis

Carcinomatosis

Cardiac arrest

Cardiac dysrhythmia

Cardiomyopathy

Cardiopulmonary arrest

Cellulitis

Cerebrovascular accident

Cerebellar tonsillar herniation

Cerebral edema

Chronic bedridden state

Cirrhosis

Coagulopathy

Compression fracture

Congestive heart failure

Convulsions

Decubiti

Dehydration

Dementia (when not otherwise
    specified)

Diarrhea

Disseminated intravascular
    coagulopathy

Dysrhythmia

End-stage liver disease

End-stage renal disease

Epidural hematoma

Exsanguination

Failure to thrive

Fracture

Gangrene

Gastrointestinal hemorrhage

Heart failure

Hemothorax

Hepatic failure

Hepatorenal syndrome

Hyperglycemia

Hyperkalemia

Hyponatremia

Hypotension

Hypovolemic shock

Immunosuppression

Increased intracranial pressure

Intracranial hemorrhage

Malnutrition

Metabolic encephalopathy

Multi-organ failure

Multi-system organ failure

Myocardial infarction

Necrotizing soft-tissue infection

Open (or closed) head injury

Pancytopenia

Perforated gallbladder

Peritonitis

Pleural effusions

Pneumonia

Pulmonary arrest

Pulmonary edema

Pulmonary embolism

Pulmonary insufficiency

Renal failure

Respiratory arrest

Seizures

Sepsis

Septic shock

Shock

Starvation

Subdural hematoma

Sudden death

Subarachnoid hemorrhage

Thrombocytopenia

Uncal herniation

Urinary tract infection

Ventricular fibrillation

Ventricular tachycardia

Volume depletion

5/4/2001

If the certifier is unable to determine the etiology of a process such as those shown above, the process must be qualified as being of an unknown, undetermined, probable, presumed, or unspecified etiology so it is clear that a distinct etiology was not inadvertently or carelessly omitted.

The following conditions and types of death might seem to be specific but when the medical history is examined further, the conditions may be found to be complications of an injury or poisoning (possibly occurring long ago):

Asphyxia	Exsanguination	Open reduction of fracture
Bolus	Fall	Pulmonary emboli
Choking	Fracture	Seizure disorder
Drug or alcohol overdose/drug or	Hip fracture	Sepsis
alcohol abuse	Hyperthermia	Subarachnoid hemorrhage
Epidural hematoma	Hypothermia	Subdural hematoma
	Hip fracture	Thermal burns/chemical burns

Is it possible that the underlying cause of death was the result of an injury or poisoning? If it might be, check with the medical examiner/coroner to find out if the death should be reported to him/her.

When indicating neoplasms as a cause of death indicate the following: 1) primary site or that the primary site is unknown, 2) benign or malignant, 3) cell type or that the cell type is unknown, 4) grade of a neoplasm, and 5) part or lobe of an organ affected. For example, a well-differentiated squamous cell carcinoma, lung, left upper lobe.

<u>References</u>

For detailed information on how to complete the medical certification section of the death certificate, you may refer to:

5/4/2001

♦ **The Medical Cause of Death Manual edited by Randy Hanzlick: can be ordered from the College of American Pathologists (800-323-4040 ext. 7531 for information and credit card orders). The product code number is B260.**

♦ **Cause-of-Death Statements and Certification of Natural and Unnatural Deaths edited by Randy Hanzlick: can be ordered from the College of American Pathologists (800-323-4040 ext. 7531 for information and credit card orders). The product code number is BK7261.**

♦ **Tutorial information available at http://www.TheNAME.org**
   (Poorly written cause-of-death statement at http://www.thename.org/screen2.htm)

♦ **State resources.**

♦ **NCHS' Medical Examiners' and Coroners' Handbook on Death Registration and Fetal Death Reporting (available from NCHS or at http://www.cdc.gov/nchs/data/hb_me.pdf).**

♦ **NCHS' Physicians' Handbook on Medical Certification of Death (available from NCHS or at http://www.cdc.gov/nchs/data/hb_cod.pdf).**

♦ **Laminated cards (available from NCHS or at http://www.cdc.gov/nchs/about/major/dvs/handbk.htm).**

Approximate interval between onset and death

Record the interval between the presumed onset of the condition (not the diagnosis of the condition) and the date of death. This should be entered for all conditions in Part I. These intervals usually are established by the physician on the basis of available information. In some cases the interval will have to be estimated. If the time of onset is entirely unknown, state that the interval is "Unknown." Do not leave these items blank.

This information is useful in coding certain diseases and also provides a useful check on the accuracy of the reported sequence of conditions.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITIONS
CODIa	Info reported on line a, part I	Literal	
CODIb	Info reported on line b, part I	Literal	
CODIc	Info reported on line c, part I	Literal	
CODId	Info reported on line d, part I	Literal	

CODII   Info reported in part II   Literal

INTIa   Duration line a, part I   Literal
INTIb   Duration line b, part I   Literal
INTIc   Duration line c, part I   Literal
INTId   Duration line d, part I   Literal

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

The electronic death certificate can be made more useful by providing some more immediate edit checks based on literal entries. Below are some specifications.

1) Unacceptable causes. An edit that flags the following as unacceptable causes if they are the only cause reported or are reported on the lowest line of the certification: respiratory arrest, RAR, resp arrest, asystole, cardiac arrest, CAR, cardio-respiratory arrest, cardiac pul arrest, cardiac pulmonary arrest, cardiopulmonary arrest, CPAR, ventricular fibrillation, VF, electrical mechanical dissociation, EMD, and electromechanical dissociation.

The edit message should be: **Mechanistic terminal events such as the last entry preferably should not be either the only cause or underlying cause in a cause-of-death statement. Please enter the medical conditions that led to this terminal event.**

2) Spellcheck. Include an automatic spelling checker

3) Abbreviations and parentheses. If there is an abbreviation or parentheses in the cause-of-death statement, provide a message that neither is good practice and please specify what is meant. It would be desirable to customize abbreviations so that the computer would ask if the certifier meant x,y, or specify. Providing possible terms using the same abbreviations would a) illustrate why using abbreviations is confusing and b) lessen the work the certifier needs to do to correct the

5/4/2001

entry. The abbreviations, shown below, are from NCHS Instruction Manual Part 2b, Instructions for Classifying Multiple Causes of Death, 2000.

*The edit message should be: **Please do not use abbreviations to report cause of death. We think that the full term for (e.g., AAA) is (e.g., abdominal aortic aneurysm)? Indicate which term is correct if multiple meanings are possible, or specify what you meant by the abbreviation if we have not suggested the correct full term. Thank you.***

AAA	abdominal aortic aneurysm	
AAS	aortic arch syndrome	
AAT	alpha-antitrypsin	
AAV	AIDS-associated virus	
AB	abortion; asthmatic bronchitis	
ABD	abdomen	
ABE	acute bacterial endocarditis	
ABS	acute brain syndrome	
ACA	adenocarcinoma	
ACD	arteriosclerotic coronary disease; absolute cardiac dullness	
ACH	adrenal cortical hormone	
ACT	acute coronary thrombosis	
ACTH	adrenocorticotrophic hormone	
ACVD	arteriosclerotic cardiovascular disease	
AD	auris dextra (right ear); addiction, drug; adenoidal degeneration; atrio dextro (rt. atrium)	
ADEM	acute disseminated encephalomyelitis	
ADH	antidiuretic hormone	
ADS	antibody deficiency syndrome	
AEG	air encephalogram	
AF	auricular or atrial fibrillation; acid fast	
AFB	acid-fast bacillus	
AFI	amaurotic familial idiocy	
AGG	agammaglobulinemia	
AGL	acute granulocytic leukemia	
AGN	acute glomerulonephritis	
AGS	adrenogenital syndrome	
AHA	acquired hemolytic anemia; autoimmune hemolytic anemia	
AHD	arteriosclerotic heart disease	
AHHD	arteriosclerotic	

	hypertensive heart disease	
AHG	anti-hemophilic globulin deficiency	
AHLE	acute hemorrhagic leukoencephalitis	
AI	aortic insufficiency; additional information	
AIDS	acquired immunodeficiency syndrome	
AKA	above knee amputation	
ALL	acute lymphocytic leukemia	
ALS	amyotrophic lateral sclerosis	
AMI	acute myocardial infarction	
AML	acute myelocytic leukemia	
ANS	arteriolonephrosclerosis	
AOD	arterial occlusive disease	
AODM	adult onset diabetes mellitus	
AOM	acute otitis media	
AP	angina pectoris; anterior and posterior repair; artificial pneumothorax; anterior pituitary	
A&P	anterior and posterior repair	
APC	auricular premature contraction; Acetylsalicylic acid, Acetophenetidin, and caffeine	
APE	acute pulmonary edema; anterior pituitary extract	
APH	antepartum hemorrhage	
AR	aortic regurgitation	
ARC	AIDS-related complex	
ARF	acute respiratory failure	
ARM	artificial rupture of membranes	
ARV	AIDS-related virus	
AS	arteriosclerotic; arteriosclerosis; aortic stenosis; auris sinestra (left ear)	
ASA	acetylsalicylic acid (aspirin)	

ASAD	arteriosclerotic artery disease
ASCD	arteriosclerotic coronary disease
ASCHD	arteriosclerotic coronary heart disease
ASCVA	arteriosclerotic cerebrovascular accident
ASCVD	arteriosclerotic cardiovascular disease
ASCVHD	arteriosclerotic cardiovascular heart disease
ASCVRD	arteriosclerotic cardiovascular renal disease
ASD	atrial septal defect
ASDHD	arteriosclerotic decompensated heart disease
ASHCVD	arteriosclerotic hypertensive cardiovascular disease
ASHD	arteriosclerotic heart disease; atrioseptal heart defect
ASHHD	arteriosclerotic hypertensive heart disease
ASHVD	arteriosclerotic hypertensive vascular disease
ASO	arteriosclerosis obilterans
ASPVD	arteriosclerotic peripheral vascular disease
ASVD	arteriosclerotic vascular disease
ASVH(D)	arteriosclerotic vascular heart disease
ATC	all-terrain cycle
ATN	acute tubular necrosis
ATS	anxiety tension state; anti-tetanus serum; arteriosclerosis

ATSHD   arteriosclerotic heart disease
ATV   all-terrain vehicle
AU   aures unitas (both ears)
AUL   acute undifferentiated leukemia

AV   arteriovenous; auriculoventricular; aortic valve
AVF   arterio-ventricular fibrillation; arteriovenous fistula
AVH   acute viral hepatitis
AVP   aortic valve prosthesis
AVR   aortic valve replacement
AWMI   anterior wall myocardial infarction
AZT   azidothymidine
BA   basilar arteriogram; bronchial asthma; basilar artery
B&B   bronchoscopy and biopsy
BBB   bundle branch block
B&C   biopsy and cauterization
BCE   basal cell epithelioma
BE   barium enema
BEH   benign essential hypertension
BGL   Bartholin's gland
BKA   below knee amputation
BL   bladder; bucolingual; blood loss; Burkitt's lymphoma
BMR   basal metabolism rate
BNA   Bladder neck adhesions
BNO   bladder neck obstruction
BOMSA   bilateral otitis media serous acute
BOMSC   bilateral otitis media serous chronic
BOW   "bag of water" (membrane)
B/P, BP   blood pressure
BPH   benign prostate hypertrophy
BSA   body surface area
BSO   bilateral salpingo-oophorectomy
BSP   Bromosulfaphthalein test
BTL   bilateral tubal ligation
BUN   blood, urea, and nitrogen test
BVL   bilateral vas ligation
B&W   Baldy-Webster suspension (uterine)
BX   biopsy
BX CX   biopsy cervix

c̄   with
Ca   cancer
CA   cancer; carotid arteriogram; cardiac arrest
CAD   coronary artery disease
CAG   chronic atrophic gastritis

CAO   coronary artery occlusion; chronic airway obstruction
CAS   cerebral arteriosclerosis
CASCVD   chronic arteriosclerotic cardio-vascular disease
CB   chronic bronchitis
CBC   complete blood count
CBD   common bile duct
CBS   chronic brain syndrome
CCF   chronic congestive failure
CCI   chronic cardiac or coronary insufficiency
CDE   common duct exploration
CDH   congenital dislocation hip
CF   congestive failure; compliment fixation test; cystic fibrosis; Christmas factor (plasma thromboplastin component)
CFT   chronic follicular tonsillitis
CGN   chronic glomerulonephritis
CHA   congenital hypoplastic anemia
CHB   complete heart block
CHD   congestive heart disease; coronary heart disease; Chediak-Higaski Disease; congenital heart disease
CHF   congestive heart failure
C₂H₅OH   ethyl alcohol
CI   cardiac insufficiency; cerebral infarction
CID   cytomegalic inclusion disease
CIS   carcinoma in situ
CLD   chronic lung disease; chronic liver disease
CLL   chronic lymphatic leukemia; chronic lymphocytic leukemia
CMID   cytomegalic inclusion disease
CML   chronic myelocytic leukemia
CMM   cutaneous malignant melanoma
CMV   cytomegalic virus
CNHD   congenital nonspherocytic hemolytic disease
CNS   central nervous system
CO   carbon monoxide
COAD   chronic obstructive airway disease
CO₂   carbon dioxide
COBE   chronic obstructive bullous emphysema
COBS   chronic organic brain syndrome
COFS   cerebro-oculo-facio-skeletal
COOMBS   test for Rh sensitivity

COLD   chronic obstructive lung disease
COPD   chronic obstructive pulmonary disease
COPE   chronic obstructive pulmonary emphysema
CP   cerebral palsy; cor pulmonale
C&P   cystoscopy and pyelography
CPB   cardiopulmonary bypass
CPC   chronic passive congestion
CPD   cephalopelvic disproportion; contagious pustular dermatitis
CPE   chronic pulmonary emphysema
CRD   chronic renal disease
CRF   cardiorespiratory failure; chronic renal failure
CRST   calcinosis cutis, Raynaud's phenomenon, sclerodactyly, and telangiectasis
CS   coronary sclerosis; cesarean section; cerebro-spinal
CSF   cerebral spinal fluid
CSH   chronic subdural hematoma
CSM   cerebrospinal meningitis
CT   cerebral thrombosis; coronary thrombosis
CTD   congenital thymic dysplasia
CU   cause unknown
CUC   chronic ulcerative colitis
CUP   cystoscopy, urogram, pyelogram (retro)
CUR   cystocele, urethrocele, rectocele
CV   cardiovascular; cerebrovascular
CVA   cerebral vascular accident
CV Accident   cerebral vascular accident
CVD   cardiovascular disease
CVHD   cardiovascular heart disease
CVI   cardiovascular insufficiency; cerebral vascular insufficiency
CVRD   cardiovascular renal disease
CWP   coal worker's pneumoconiosis
CX   cervix
DA   degenerative arthritis
DBI   Phenformin hydrochloride
D&C   dilation and curettage
DCR   dacrocystorhinostomy
D&D   drilling and drainage; debridement and dressing
D&E   dilation and evacuation
DFU   dead fetus in utero
DIC   disseminated intravascular coagulation
DILD   diffuse infiltrative lung

disease
DIP   distal interphalangeal joint; desquamative interstitial pneumonia
DJD   degenerative joint disease
DM   diabetes mellitus
DMT   dimethyltriptamine
DOA   dead on arrival
DOPS   diffuse obstructive pulmonary syndrome
DPT   diphtheria, pertussis, tetanus vaccine
DR   diabetic retinopathy
DS   Down's syndrome
DT   due to; delirium tremens
D/T   delirium tremens; due to
DU   diagnosis unknown; duodenal ulcer
DUB   dysfunctional uterine bleeding
DUI   driving under influence
DVT   deep vein thrombosis
DWI   driving while intoxicated
DX   dislocation; diagnosis; disease
EBV   Epstein-Barr virus
ECCE   extracapsular cataract extraction
ECG   electrocardiogram
ECT   electric convulsive therapy
EDC   expected date of confinement
EEE   Eastern equine encephalitis
EEG   electroencephalogram
EFE   endocardial fibroelastosis
EGL   eosinophilic granuloma of lung
EH   enlarged heart; essential hypertension
EIOA   excessive intake of alcohol
EKC   epidemic keratoconjunctivitis
EKG   electrocardiogram
EKP   epikeratoprosthesis
ELF   elective low forceps
EMC   encephalomyocarditis
EMD   electromechanical dissociation
EMF   endomyocardial fibrosis
EMG   electromyogram
EN   erythema nodosum
ENT   ear, nose, and throat
EP   ectopic pregnancy
ER   emergency room
ERS   evacuation of retained secundines
EST   electric shock therapy
ETOH   alcohol
EUA   exam under anesthesia

5/4/2001

EWB   estrogen withdrawal bleeding
FB   foreign body
FBS   fasting blood sugar
Fe   symbol for iron
FGD   fatal granulomatous disease
FHS   fetal heart sounds
FHT   fetal heart tone
FLSA   follicular lymphosarcoma
FME   full-mouth extraction
FS   frozen section; fracture site
FT   full term
FTA   fluorescent Treponemal antibody test
5FU   Fluorouracil
FUB   functional uterine bleeding
FULG   fulguration
FUO   fever unknown origin
FX   fracture
FYI   for your information
GAS   generalized arteriosclerosis
GB   gallbladder; Guillain-Barre syndrome
GC   gonococcus; gonorrhea; general circulation (systemic)
GI   gastrointestinal
GIT   gastrointestinal tract
GOK   God only knows
GSW   gunshot wound
GTT   glucose tolerance test
gtt   drop
GU   genitourinary; gastric ulcer
GVHR   graft versus host reaction
GYN   gynecology
HA   headache
HAA   hepatitis associated antigen
HASCVR   hypertensive arteriosclerotic cardiovascular renal disease
HASVD   hypertensive arteriosclerotic vascular disease
HB   hemoglobin; heart block
HBP   high blood pressure
HC   Huntington's chorea
HCT   hematocrit
HCVD   hypertensive cardiovascular disease
HCVRD   hypertensive cardiovascular renal disease
HD   Hodgkin's disease; heart disease
HDN   hemolytic disease of newborn
HDS   herniated disc syndrome
HF   heart failure; hayfever
HGB;Hgb   hemoglobin
HHD   hypertensive heart disease
HIV   human immunodeficiency

virus
HMD   hyaline membrane disease
HN$_2$ Nitrogen Mustard
HNP   herniated nucleus pulposus
H/O   history of
HPN   hypertension
HPVD   hypertensive pulmonary vascular disease
HRE   high-resolution electro-cardiology
HS   herpes simplex; Hurler's syndrome
HTLV-III/LAV   human T-cell lymphotropic virus-III/ lymphadenopathy-associated virus
HTLV-3   human T-cell lymphotropic virus-III
HTLV-III   human T-cell lymphotropic virus -III
HVD   hypertensive vascular disease
Hx   history of
IADH   inappropriate antidiuretic hormone
IASD   interatrial septal defect
ICCE   intracapsular cataract extraction
ICD   intrauterine contraceptive device
I&D   infectious disease; incision and drainage
IDA   iron deficiency anemia
IDDM   type 1 diabetes
IH   infectious hepatitis
IHD   ischemic heart disease
IHSS   idiopathic hypertrophic subaortic stenosis
ILD   ischemic leg disease
IM   intramuscular; intramedullary; infectious mononucleosis
IMPP   intermittent positive pressure
INAD   infantile neuroaxonal dystrophy
INC   incomplete
INE   infantile necrotizing encephalomylopathy
INF   infection; infected; infantile; infarction
INH   Isoniazid; inhalation
INS   idiopathic nephrotic syndrome
IO   intestinal obstruction
IOH   idiopathic orthostatic hypotension
IPD   inflammatory pelvic disease
IPP   intermittent positive pressure

IRDS idiopathic respiratory distress syndrome
IRHD inactive rheumatic heart disease
ISD interatrial septal defect
ITP idiopathic thrombocytopenic purpura
IU intrauterine
IUCD intrauterine contraceptive device
IUD intrauterine device (contraceptive); intrauterine death
IUP intrauterine pregnancy
IVC intravenous cholangiography; inferior vena cava
IVCC intravascular consumption coagulopathy
IVD intervertebral disc
IVH intraventricular hemorrhage
IVP intravenous pyelogram
IVSD intraventricular septal defect
IVU intravenous urethrography
IWMI inferior wall myocardial infarction
JBE Japanese B encephalitis
KFS Klippel-Feil syndrome
KS Klinefelter's syndrome
KUB kidney, ureter, bladder
K-W Kimmelstiel-Wilson disease or syndrome
LAP laparotomy
LAV lymphadenopathy-associated virus
LAV/ lymphadenopathy-associated
HTLV-III virus/Human T-cell lymphotrophic virus-III
LBBB left bundle branch block
LBNA lysis bladder neck adhesions
LBW low birth weight
LBWI low birth weight infant
LCA left coronary artery
LDH lactic dehydrogenase
LE lupus erythematosus; lower extremity; left eye
LKS liver, kidney, spleen
LLL left lower lobe
LMA left mentoanterior (position of fetus)
LMCAT left middle cerebral artery thrombosis
LML left mesiolateral; left mediolateral (episiotomy)
LMP last menstrual period; left mento-posterior (position of fetus)
LN lupus nephritis

LOA left occipitoanterior
LOMCS left otitis media chronic serous
LP lumbar puncture
LRI lower respiratory infection
LS lumbosacral;lymphosarcoma
LSD lysergic acid diethylamide
LSK liver, spleen, kidney
LSO left salpingo-oophorectomy
LTB laryngotracheobronchitis
LUL left upper lobe
LVF left ventricular failure
LVH left ventricular hypertrophy
MBD minimal brain damage
MD muscular dystrophy; manic depressive; myocardial damage
MDA methylene dioxyamphetamine
MEA multiple endocrine adenomatosis
MF myocardial failure; myocardial fibrosis; mycosis fungoides
MGN membranous Glomerulonephritis

MHN massive hepatic necrosis
MI myocardial infarction; mitral insufficiency
MID multi-infarct dementia
MLC myelomonocytic leukemia, chronic
MM malignant melanoma; multiple myeloma
MMOA mandible, maxillary, odontectomy, alveolectomy
MOD mode of death; moment of death
MPC meperidine, promethazine, chlorpromazine
MS multiple sclerosis; mitral stenosis
MT malignant teratoma
MUA myelogram
MVR mitral valve regurgitation
NACD no anatomical cause of death
NCA neurocirculatory asthenia
NDI nephrogenic diabetes insipidus
NFI no further information
NFTD normal full-term delivery
NH_3 symbol for ammonia
NIDDM type 2 diabetes
NMI no more information
NPD Niemann-Pick disease
NSD normal spontaneous

delivery; nonsurgical delivery
NSR normal sinus rhythm; nasal submucous resection
NTG nontoxic goiter
NTN nephrotoxic nephritis
N&V nausea and vomiting
NVD nausea, vomiting, diarrhea
OA osteoarthritis
OAD obstructive airway disease
OB obstetrical
OBS organic brain syndrome
OBST obstetrical
OD oculus dexter (right eye); overdose; occupational disease
OHD organic heart disease
OM otitis media
OMI old myocardial infarction
OMS organic mental syndrome
ORIF open reduction, internal fixation
OS oculus sinister (left eye); occipitosacral (fetal position)
OT occupational therapy; old TB
OU oculus uterque (each eye); both eyes
PA pericious anemia; paralysis agitans; pulmonary artery; peripheral arterio sclerosis
PAC premature auricular contraction; phenacetin, aspirin, caffeine
PAF paroxysmal auricular fibrillation
PAOD peripheral arterial occlusive disease; peripheral arteriosclerosis occlusive disease
PAP primary atypical pneumonia
PAS pulmonary artery stenosis
PAT pregnancy at term; paroxysmal auricular tachycardia
Pb chemical symbol for lead
PCD polycystic disease
PCF passive congestive failure
PCP pentachlorophenol; pneumocystis carinii pneumonia
PCT porphyria cutanea tarda
PCV polycythemia vera
PDA patent ductus arteriosus
PE pulmonary embolism; pleural effusion; pulmonary edema
PEG pneumoencephalography
PET pre-eclamptic toxemia

5/4/2001

PG   pregnant; prostaglandin
PGH   pituitary growth hormone
PH   past history; prostatic hyertrophy; pulmonary hypertension
PI   pulmonary infarction
PID   pelvic inflammatory disease; pro-lapsed intervertebral disc
PIE   pulmonary interstitial emphysema
PIP   proximal interphalangeal joint
PKU   phenylketonuria
PMD   progressive muscular dystrophy
PMI   posterior myocardial infarction; point of maximum impulse
PN   periarteritis nodosa; pneumonia;pyelonephritis
PO   postoperative
POC   product of conception
POE   point (or portal) of entry
PP   postpartum
PPD   purified protein derivative test for tuberculosis
PPH   postpartum hemorrhage
PPLO pleuropneumonia-like organism
PPS   postpump syndrome
PPT   precipitated; prolonged prothrombin time
PROM premature rupture of membranes
PT   paroxysmal tachycardia; pneumothorax; prothrombin time
PTA   prior to admission; persistent truncus arteriosus
PTC   plasma thromboplastin component
PU   peptic ulcer
PUD   peptic ulcer disease; pulmonary disease
PUO   pyrexia of unknown origin
P&V   pyloroplasty and vagotomy
PVC   premature ventricular contraction
PVD   peripheral vascular disease; pulmonary vascular disease
PVI   peripheral vascular insufficiency
PVT   paroxysmal ventricular tachycardia
PVS   premature ventricular systole (contraction)
PWI   posterior wall infarction
PWMI posterior wall myocardial infarction
PX   pneumothorax

R   right
RA   rheumatoid arthritis; right atrium; right auricle
RAD   radiation absorbed dose
RAI   radioactive iodine
RBBB right bundle branch block
RBC   red blood cells
RCA   right coronary artery
RCS   reticulum cell sarcoma
RD   Raynaud's disease; respiratory disease
RDS   respiratory distress syndrome
RE   regional enteritis
REG   radioencephalogram
RF   rheumatic fever
RHD   rheumatic heart disease
RLF   retrolental fibroplasia
RLL   right lower lobe
RMCA right middle cerebral artery
RMCAT right middle cerebral artery thrombosis
RMLE right mediolateral episiotomy
RNA   ribonucleic acid
RND   radical neck dissection
R/O   rule out
RSA   reticulum cell sarcoma
RSR   regular sinus rhythm
Rt   right
RT   recreational therapy; right
RTA   renal tubular acidosis
RV   right ventricle
RVH   right ventricular hypertrophy
RVT   renal vein thrombosis
RX   drugs or other therapy or treatment
S̄   without
SA   sarcoma; secondary anemia
SACD subacute combined degeneration
SBE   subacute bacterial endocarditis
SBO   small bowel obstruction
SC   sickle cell
SCC   squamous cell carcinoma
SCI   Subcoma insulin; spinal cord injury
SD   spontaneous delivery; septal defect; sudden death
SDAT senile dementia, Alzheimer's type
SDII   sudden death in infancy
SDS   sudden death syndrome
SF   scarlet fever
SGA   small for gestational age
SH   serum hepatitis
SI   saline injection
SIADH syndrome of inappropriate antidiuretic hormone

SICD   sudden infant crib death
SID   sudden infant death
SIDS   sudden infant death syndrome
SLC   short leg cast
SLE   systemic lupus erythematosus; Saint Louis encephalitis
SMR   submucous resection
SNB   scalene node biopsy
SO or S&O salpingo-oophorectomy
SOB   shortness of breath
SOM   secretory otitis media
SOR   suppurative otitis, recurrent
S/P   status post
SPD   sociopathic personality disturbance
SPP   suprapubic prostatectomy
SQ   subcutaneous
S/R   schizophrenic reaction; sinus rhythm
S/p P/T schizophrenic reaction, paranoid type
SSE   soapsuds enema
SSKI   saturated solution potassium iodide
SSPE   subacute sclerosing panencephalitis
STB   stillborn
STS   serological test for syphilis
STSG   split thickness skin graft
SUBQ   subcutaneous
SUD   sudden unexpected death
SUDI   sudden unexplained death of an infant
SUID   sudden unexpected infant death
SVC   superior vena cava
SVD   spontaneous vaginal delivery
Sx   symptoms
T&A   tonsillectomy and adenoidectomy
TAH   total abdominal hysterectomy
TAL   tendon achilles lengthening
TAO   Triacetyloleandomycin (antibiotic); thromboangiitis oliterans
TAPVR total anomalous pulmonary venous return
TAR   thrombocytopenia absent radius (syndrome)
TAT   tetanus anti-toxin
TB   tuberculosis; tracheobronchitis
TBC,Tbc tuberculosis
TBLC   term birth living child
TCI   transient cerebral ischemia

5/4/2001

TEF	tracheo-esophageal fistula	UC	ulcerative colitis	VR	valve replacement
TF	tetralogy of Fallot	UP	ureteropelvic	VSD	ventricular septal defect
TGV	transposition great vessels	UPJ	ureteropelvic junction	VT	ventricular tachycardia
TI	tricuspid insufficiency	URI	upper respiratory infection	WBC	white blood cell
TIA	transient ischemic attack	UTI	urinary tract infection	WC	whooping cough
TIE	transient ischemic episode	VAMP	vincristine, amethopterine,	WE	Western encephalomyelitis
TL	tubal ligation		6-mercaptopurine, and	WPW	Wolfe-Parkinson-White
TM	tympanic membrane		prednisone		syndrome
TOA	tubo-ovarian abscess	VB	vinblastine	YF	yellow fever
TP	thrombocytopenic purpura	VC	vincristine	ZE	Zollinger-Ellison (syndrome)
TSD	Tay-Sachs disease	VD	venereal disease	#	fracture
TTP	thrombotic	VDRL	venereal disease research lab	'	minute
	thrombocytopenic purpura	VEE	Venezuelan equine	"	second(s)
TUI	transurethral incision		encephalomyelitis	↓	decreased
TUR	transurethral resection	VF	ventricular fibrillation	↑	increased; elevated
	(NOS) (prostate)	VH	vaginal hysterectomy; viral	s̄	without
TURP	transurethral resection of		hepatitis		
	prostate	VL	vas ligation	00	
TVP	total anomalous venous	VM	viomycin	11	secondary to
	return	V&P	vagotomy and pyloroplasty		
		VPC	ventricular premature	00	
			contractions	11 to	secondary to

4) _Rare cause_. _If a rare cause of death is on the death certificate, provide an automatic query_ _stating:_ **The reported cause is one of the causes that State Health Departments always try to verify, either because the cause is rarely reported on a death certificate or because it may present threats to public health in the United States.** _Then ask,_ **Was this the cause of death that the certifier intended to enter?**

The diagnosis then needs to be confirmed by the certifier. It is strongly recommended by NCHS/CDC that the State vital statistics program notify, as soon as possible, the state health officer (or designee) and the state epidemiologist of validated rare causes of death. For all cases, a notation of confirmation should be recorded on a copy of the certificate that is sent to the NCHS, whether confirmed electronically or by traditional means. Correspondence between NCHS and the State will still be needed, so that we ensure that all appropriate parties are aware that a rare cause has been reported.

The following list of infrequent and rare causes is from NCHS Instruction Manual Part 2a, Instructions for classifying the underlying cause of death, 2001:

5/4/2001

A00	Cholera
A01	Typhoid and paratyphoid fevers
A05.1	Botulism (botulism, infant botulism, wound botulism)
A07.0-.2,.8-.9	Other protozoal intestinal diseases, excluding coccidiosis
A20	Plague
A21	Tularemia
A22	Anthrax
A23	Brucellosis
A24.0	Glanders
A24.1-.4	Melioidosis
A25	Rat-bite fever
A27	Leptospirosis
A30	Leprosy
A33	Tetanus neonatorum
A34	Obstetrical tetanus
A35	Other tetanus (Tetanus)
A36	Diphtheria
A37	Whooping cough
A44	Bartonellosis
A65	Nonvenereal syphyllis
A66	Yaws
A67	Pinta
A68	Relapsing fever
A69	Other spirochetal infection
A70	Chlamydia psittaci infection (ornithosis)
A75.0	Louse-born typhus due to Rickettsia prowazekii
A75.1-.9	Other typhus
A77.1	Spotted fever due to Rickettsia conorii (Boutonneuse fever)
A77.2	Spotted fever due to Rickettsia siberica (North Asian tick fever)
A77.3	Spotted fever due to Rickettsia australis (Queensland tick typhus)
A77.8	Other spotted fevers (Other tick-born rickettsioses)
A77.9	Unspecified spotted fevers (Unspecified tick-born rickettsioses)
A78	Q fever
A79	Other Rickettsioses
A80	Acute poliomyelitis
A81	Slow virus infections of central nervous system
A82	Rabies
A84	Tick-born viral encephalitis

A85.2	Arthropod-born viral encephalitis, unspecified (Viral encephalitis transmitted by other and unspecified arthropods)
A90	Dengue fever
A91	Dengue hemmorrhagic fever
A92	Other mosquito-born viral fevers
A93	Other arthropod-born viral fevers including Oropouche fever, sandfly fever, Colorado tick fever and other specified
A94	Unspecified arthropod-born viral fever
A95	Yellow fever
A96	Arenaviral hemorrhagic fever
A98-A99	Other viral hemorrhagic fevers including Crimean-Congo, Omsk, Kyasanur Forest, Ebola virus, Hanta virus
B01	Varicella without complication (Chickenpox)
B03	Small pox
B04	Monkeypox
B05	Measles
B06	Rubella
B08.0	Other orthopoxvirus (cowpox and paravaccinia)
B26	Mumps
B33.0	Epidemic myalgia (epidemic pleurodynia)
B50-B54	Malaria
B55	Leishmaniasis
B56	African trypanosomiasis (trypanosomiasis)
B57	Chagas' disease (trypanosomiasis)
B65	Schistosomiasis
B66	Other fluke infections (Other trematode infection)
B67	Echinococcosis
B68	Taeniasis
B69	Cysticercosis
B70	Diphyllobothriasis and sparganosis
B71	Other cestode infections
B72	Dracunculiasis (Dracontiasis)
B73	Onchocerciasis
B74	Filariasis (Filarial infection)
P35.0	Congenital rubella syndrome
W88-W91	Exposure to radiation
Y36.5	War operation involving nuclear weapons

Causing adverse effects in therapeutic use:

Y58	Bacterial vaccines
Y59.0	Viral vaccines
Y59.1	Rickettsial vaccines
Y59.2	Protozoal vaccines
Y59.3	Immunoglobulin

5) *Specificity for cancer. If words indicative of cancer appear on the death certificate (as shown below), ask* **Have you specified the site and cell type or if the condition had metastasized? Thank you.** *The following list is from Instruction manual part 2g, Data*

Entry Instructions for the Mortality Medical Indexing, Classification, and Retrieval

System (MICAR), 2000.

Acidophil cancer
Acidophil carcinoma
Adenocarcinoma
Adenocarcinomatosis
Adenofibroma
Adenoid cystic carcinoma
Adenoma
Adenomatous polyp
Adenomatous polyposis
Adenosarcoma
Adenosquamous (cell) cancer
Adenosquamous (cell) carcinoma
Aleukemic leukemia
Alveolar adenocarcinoma
Alveolar carcinoma
Alveolar cancer
Alveolar cell cancer
Alveolar cell carcinoma
Alveolar rhabdomyosarcoma
Anaplastic adenocarcinoma
Anaplastic astrocytoma
Anaplastic cancer
Anaplastic carcinoma
Anaplastic fulminant cancer
Anaplastic fulminant carcinoma
Angioblastic meningioma
Angioblastoma
Angioma
Angiomyosarcoma
Angiosarcoma
Apocrine cancer
Apocrine carcinoma
Astroblastoma
Astrocytoma
Astroglioma
Basal cell cancer
Basal cell carcinoma
Basal cell epithelioma
Basophil adenocarcinoma
Basophil cancer
Basophil carcinoma
Bile duct type cancer
Bile duct type carcinoma
C cell cancer
C cell carcinoma
Cancer
Carcinoid
Carcinoid malignancy
Carcinoid tumor
Carcinoma

Carcinomatosis
Cavernous hemangioma
Cavernous lymphangioma
Chemodectoma
Cholangiocarcinoma
Cholangiohepatoma
Cholangioma
Chondrosarcoma
Chordoma
Choriocarcinoma
Chorioepithelioma
Chorionic cancer
Chorionic carcinoma
Chromophobe adenocarcinoma
Chromophobe adenoma
Chromophobe cancer
Chromophobe carcinoma
Clear cell adenocarcinoma
Congenital leukemia
Craniopharyngioma
Cylindroma
Cystadenocarcinoma
Dermatofibroma
Dermatofibrosarcoma
Di Guglielmos disease
Duct cell carcinoma
Ductal cancer
Ductal carcinoma
Ductal cell carcinoma
Dukes adenocarcinoma
Dukes cancer
Dysgerminoma
Eaton lambert syndrome
Embryoma
Embryonal adenocarcinoma
Embryonal cancer
Embryonal carcinoma
Eosinophil adenocarcinoma
Eosinophil cancer
Eosinophil carcinoma
Ependymoblastoma
Ependymoma
Epidermoid cancer
Epidermoid carcinoma
Epidermoid cystic tumor
Epithelioma
Erythremic myelosis
Erythrocythemia
Erythroleukemia
Ewings sarcoma

Ewings tumor
Familial polyposis
Fibroid
Fibroid tumor
Fibrolipoma
Fibroliposarcoma
Fibroma
Fibromyoma
Fibromyosarcoma
Fibromyxolipoma
Fibromyxosarcoma
Fibrosarcoma
Fibrous histiocytoma
Follicular adenocarcinoma
Follicular lymphoma
Ganglioglioma
Gardners syndrome
Gastrinoma
Gastrocarcinoma
Germ cell carcinoma
Giant cell cancer
Giant cell carcinoma
Giant cell leukemia
Glioblastoma
Glioblastoma multiforme
Glioma
Gliosarcoma
Glomangioma
Granulocytic leukemia
Granulocytic leukemia blast crisis
Granulosa cell cancer
Granulosa cell carcinoma
Growth
Hemangioendothelioma
Hemangioma
Hemangiopericytoma
Hemangiosarcoma
Hemoleukemia
Hepatoblastoma
Hepatocarcinoma
Hepatocellular cancer
Hepatocellular carcinoma
Hepatocholangiocarcinoma
Hepatocholangiolitic cancer
Hepatocholangiolitic carcinoma
Hepatoma
Histiocytic leukemia
Histiocytic lymphoma
Histiocytoma
Hodgkins disease

Hodgkins disease
Hodgkins lymphoma
Hurthle cell adenocarcinoma
Hurthle cell adenoma
Hurthle cell cancer
Hurthle cell carcinoma
Hygroma
Hypernephroma
Immunoblastic sarcoma
Immunolymphosarcoma
Infiltrating duct adenocarcinoma
Infiltrating duct cancer
Infiltrating duct carcinoma
Infiltrating duct cell cancer
Infiltrating duct cell carcinoma
Infiltrating ductal carcinoma
Infiltrating lobular carcinoma
Inflammatory cancer
Inflammatory carcinoma
Insulinoma
Insuloma
Intraductal cancer
Intraductal carcinoma
Islet cell adenocarcinoma
Islet cell adenoma
Islet cell cancer
Islet cell carcinoma
Kaposi sarcoma
Kaposis sarcoma
Kasabach Merritt syndrome
Krukenbergs tumor
Large cell anaplastic cancer
Large cell anaplastic carcinoma
Large cell cancer
Large cell carcinoma
Large cell lymphoma
Large cell tumor
Leiomyosarcoma
Lesion
Leucosarcoma
Leukemia
Leukemic crisis
Leukemic infiltrate
Leukemic infiltration
Leukemic lymphosarcoma
Leukolymphosarcoma
Leukosarcoma
Linitis plastica
Lipoblastoma
Lipoblastomatosis
Lipofibroma
Lipoma
Lipomyosarcoma
Lipomyxoma
Lipomyxosarcoma
Liposarcoma
Lobular carcinoma

Lymphangiosarcoma
Lymphangiosarcoma
Lymphatic leukemia
Lymphocyte depleted
Lymphocytic leukemia
Lymphocytic lymphoma
Lymphocytic lymphosarcoma
Lymphogenous leukemia
Lymphohistiocytic lymphoma
Lymphoid leukemia
Lympholeukemia
Lymphoma
Lymphomatous disease
Lymphoproliferative disease
Lymphoproliferative disorder
Lymphoreticularproliferative disease
Lymphoreticularproliferative
    disorder
Lymphoreticulum cell leukemia
Lymphosarcoma
Lymphosarcoma cell leukemia
Lymphosarcoma leukemia
Malignancy
Mass
Medullary carcinoma
Medulloblastoma
Megaadenoma
Megakaryocytic leukemia
Megakaryocytic myelosclerosis
Megakaryocytoid leukemia
Megaloleukemia
Meigs syndrome
Melanoma
Meningioma
Mesenchymoma
Mesoepithelioma
Mesothelioma
Metastases
Metastasis
Microglioma
Mixed cell leukemia
Mixed cell lymphoma
Mixed leukemia
Monocytic leukemia
Monocytoid leukemia
Monoleukemia
Monoleukocytic leukemia
Monomyelocytic leukemia
Monomyelogenous leukemia
Mucinous adenocarcinoma
Mucinous adenofibroma
Mucinous cancer
Mucinous carcinoma
Mucinous cystadenocarcinoma
Mucinous cystadenocarcoma
Mucinous cystadenoma
Mucoepidermoid cancer

Mucoepidermoid carcinoma
Mucoid cell adenocarcinoma
Multiple myeloma
Myelogenous leukemia
Myeloid leukemia
Myeloleukemia
Myeloma
Myelomonocytic leukemia
Myeloproliferative disease
Myeloproliferative disorder
Myeloproliferative syndrome
Myelosis
Myoliposarcoma
Myoma
Myxofibrosarcoma
Myxoliposarcoma
Myxopapillary ependymoma
Myxosarcoma
Neoplasm
Neoplastic disease
Nephroblastoma
Nephroma
Neurilemmoma
Neurilemmosarcoma
Neuroblastoma
Neurofibromatosis
Neurofibrosarcoma
Neurogenic sarcoma
Nodular lymphcytic leukemia
Nodular lymphoma
Non Hodgkins lymphoma
Non oat cell carcinoma
Non small cell carcinoma
Oat cell cancer
Oat cell carcinoma
Oligodendroblastoma
Oligodendroglioma
Orchioblastoma
Osteochondrosarcoma
Osteofibrosarcoma
Osteogenic sarcoma
Osteosarcoma
Pancoast syndrome
Pancoast tumor
Pancoasts syndrome
Pancoasts tumor
Papillary adenocarcinoma
Papillary cancer
Papillary carcinoma
Papillary ependymoma
Papillary serous adenocarcinoma
Papillary serous cystadenocarcinoma
Papillary transitional (cell)
    carcinoma
Pheochromoblastoma
Pheochromocytoma
Pinealoblastoma

5/4/2001

Pinealoma	Retinoblastoma	Subependymoma
Pineoblastoma	Rhabdomyosarcoma	Subleukemic leukemia
Pineocytoma	Rhabdosarcoma	Synovial sarcoma
Plasma cell leukemia	Round cell cancer	T cell leukemia
Plasma cell myeloma	Round cell carcinoma	T cell lymphoma
Plasmacytic myeloma	Sarcoma	Teratoma
Plasmacytoma	Sarcomatosis	Theca cell cancer
Polycythemia	Schilling type monocytic leukemia	Theca cell carcinoma
Polycythemia rubra vera	Schwannoma	Thecoma
Polycythemia vera	Scirrhous carcinoma	Thrombocythemia
Polyp	Seminoma	Thrombocytic leukemia
Polyposis	Serous adenocarcinoma	Thymoma
Promyelocytic leukemia	Serous adenofibroma	Transitional (cell) cancer
Pseudofollicular leukemia	Serous cystadenocarcinoma	Transitional (cell) carcinoma
Pseudomucinous adenocarcinoma	Signet cell adenocarcinoma	Transitional cell tumor
Pseudomucinous cancer	Sipples syndrome	Tumor
Pseudomucinous carcinoma	Small cell cancer	Vaguez disease
Pseudomucinous cystadenocarcinoma	Small cell carcinoma	Vaguez Osler disease
	Small cell lymphoma	Vernet Morrison syndrome
Recklinghausens disease	Spindle cell cancer	Verrucous carcinoma
Renal cell adenocarcinoma	Spindle cell carcinoma	Villous adenocarcinoma
Renal cell cancer	Squamous cancer	Villous adenoma
Renal cell carcinoma	Squamous carcinoma	Von Recklinghausens disease
Reticularproliferative disease	Squamous cell cancer	Von Recklinghausens tumor
Reticuloendothelial tumor	Squamous cell carcinoma	WDHA syndrome
Reticulum cell sarcoma	Stem cell leukemia	Wilms tumor

6) *Underlying underlying causes*. Include an edit that flags the following as unlikely (nonspecific) underlying causes of death if reported on the lowest used line. The causes include:

Abscess	Atrial fibrillation	herniation	Dehydration
Abdominal hemorrhage	AF	Cerebral edema	Deh
Abdominal hem	Bacteremia	Cerebral Ed	Dementia (when not
Acute myocardial	Bedridden	Cerebrovascular accident	otherwise specified)
infarction	Bed ridden condition	Cerebral vascular accident	Diarrhea
A MI	Bed ridden status	Cerv accident	Disseminated intravascular
A Myocardial infarct	Bedridden state	Cerva	coagulopathy
A Myocardial infarction	Bedridden status	CVA	Dis intravascular
Acute MI	Biliary obstruction	CVACC	coagulopathy
Acute myocardial infarct	Bowel obstruction	Chronic bedridden state	Dysrhythmia
AMI	Obstructed bowel	Cirrhosis	End-stage liver disease
Adhesions	Brain injury	Cirrhosis D Cirrhosis	End-stage renal disease
Adult respiratory distress	Brain injuring	disease	End stage renal D
Syndrome	Brain stem herniation	Cirrhotic	Endstage renal
ARDS	Carcinogenesis	Coagulopathy	Endstage Renal D
Anemia	Carcinomatosis	Compression fracture	Endstage renal disease
Altered mental status	Cardiac arrest	Congestive Heart Failure	ESRD
Anoxia	Cardiac dysrhythmia	CHF	Epidural hematoma
Anoxic encephalopathy	Cardiomyopathy	Congestive HFA	Exsanguination
Arrhythmia	CMY	Congestive HTF	Exsanguinated
Ascites	Cardiopulmonary arrest	Congestive HTFA	Failure to thrive
Aspiration	Cellulitis	Convulsions	FTT
Aspir	Cerebellar tonsillar	Decubiti	Fracture

FX	Intracranial pressure	Multiple system organs	Pulmonary ed
Gangrene	increased	failure	Pulmonary embolism
Gastro Intestinal hem	Intracranial hemorrhage	Multiple systems organ	Pul embolism
Gastro Intestinal	Intracranial hem	failure	Pul embolus
hemorrhage	Malnutrition	Multiple systems organs	Pulem
Gastrointestinal Hem	Metabolic encephalopathy	failure	Pulmonary emboli
Gastrointestinal	Multi-organ failure	Multisystem organ failure	Pulmonary embolus
hemorrhage	Multiple system failure	Multisystem organs failure	Pulmonary insufficiency
Gi hem	Multiple systems failure	Multisystems organ failure	Pul insuf
Gi hemorrhage	Multisystem failure	Multisystems organs	Pul insufficiency
Gihem	Multi organ system failure	failure	Puli
G	Multi organ systems failure	Organ system failure	Pulmonary insuf
Gangrenous	Multi organs system failure	Multi-system organ failure	Renal failure
Gg	Multi organs systems	Myocardial infarction	Renfa
GOK	failure	MI	Respiratory arrest
Heart failure	Multi system organ failure	Myocardial infarct	Seizures
HFA	Multi system organs failure	Myocardium infarct	Seizure
HTF	Multi systems organ failure	Myocardium infarction	Sepsis
HTFA	Multi systems organs	Necrotizing soft-tissue	Septic shock
Hemothorax	failure	infection	Shock
Hepatic failure	Multiorgan system failure	Old age	Starvation
Hepatitis	Multiorgan systems failure	Open (or closed) head	Subarachnoid hemorrhage
Hepatorenal syndrome	Multiorgans system failure	injury	Sa hem
Hepatorenal Sy	Multiorgans systems	Closed head trauma	Sa hemorrhage
Hepatorenal syndrome	failure	Pancytopenia	Subarachnoid hem
Hyperglycemia	Multiple organ system	Paralysis	Subdural hematoma
Hyperkalemia	failure	Perforated gallbladder	Subd hematoma
Hyponatremia	Multiple organ systems	Peritonitis	Sudden death
Hypotension	failure	Pleural effusions	Thrombocytopenia
Hypovolemic shock	Multiple organs system	Pleura effusion	Uncal herniation
Immunosuppression	failure	Pleural effusion	Urinary tract infection
Increased intracranial	Multiple organs systems	Pneumonia	UTI
pressure	failure	Pn	Ventricular fibrillation
Increase intracranial	Multiple system organ	Pulmonary edema	VF
pressure	failure	Pul ed	Ventricular tachycardia
		Pul edema	VT
			Volume depletion

The flagged causes would generate either a generic message similar to the message for the first automatic query but giving the certifier more leeway in reporting these conditions. The message to the certifier is: **The condition you reported on the lowest box in Part I ("Pneumonia") usually develops as a complication of another more specific condition. Was there a specific underlying condition in this case? If so, please report it in the lowest box you use in Part I.** *The appropriate term should be used where Pneumonia is shown as an example.*

STATE FILE CONSIDERATIONS:

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. These

variables do not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
CODIa	120	alpha character string	literal
CODIb	120	alpha character string	literal
CODIc	120	alpha character string	literal
CODId	120	alpha character string	literal
CODII	240	alpha character string	literal
INTIa	20	alpha character string	literal
INTIb	20	alpha character string	literal
INTIc	20	alpha character string	literal
INTId	20	alpha character string	literal

Not necessary to transmit these variables if State does it's own cause-of-death processing and sends NCHS the output from the software.

EDI TRANSMISSION:

5/4/2001

Item Titles: **WAS AN AUTOPSY PERFORMED?**

WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH?

Item Number: **33 & 34**

Description: Information on whether or not an autopsy was performed and if the findings of the autopsy were available for completing the medical portion of the death certificate.

Source of Information:

Preferred Source: Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Certifying Physician, Medical Examiner, or Coroner

Check the appropriate box in item 33. Was an autopsy performed?

☐ Yes
☐ No

Select "Yes" if a partial or complete autopsy was performed.

If no is checked, leave item 34 blank.

If yes is checked, complete item 34 (Were autopsy findings available to complete the cause of death?)

☐ Yes
☐ No

5/4/2001

FOR AN ELECTRONIC RECORD:

EDR Developer

Selection of "Yes" or "No" to be made from list.

Was an autopsy performed?

☐ **Yes**
☐ **No**

Instructions for help screen on this item

Select "Yes" if a partial or complete autopsy was performed.

If the response is no, the next item will be skipped and the code for "Not applicable" automatically entered in the data field for item 34.

If the response is yes, the yes/no list for item 35 appears:

Were the results of the autopsy available to complete the cause of death?

☐ **Yes**
☐ **No**

After a selection is made, go to the next item.

PROCESSING VARIABLES

NAME	DESCRIPTION	VALUES	DEFINITION
AUTOP	Autopsy performed?	Y	Yes
		N	No
AUTOPF	Autopsy findings available?	Y	Yes
		N	No
		X	Not applicable

EDITS:

ELECTRONIC RECORDS

Before the record is transmitted to the State

Electronic record for item 33 must contain one of the valid responses (yes or no). It cannot be left blank. If item is left blank and certifier tries to move to the next item, a screen will appear asking that the item be completed at this time. Record cannot be printed or filed until this is complete. If the response to item 33 is "no," item 34 will be coded to "Not applicable."

If response to item 33 is yes, then item 34 must have a valid response (yes or no). It cannot be left blank. If certifier tries to move to the next item, a screen will appear that indicates an autopsy had been performed and asks that a response be chosen from the menu.

- *If item 33 is N, item 34 must be X.*
- *If item 33 is Y, item 34 must be Y or N.*
- *Items 33 and 34 cannot be blank.*

PAPER RECORDS

Records filed with this field blank are queried. If no response to query, assign the "No" code to 33 and the "Not applicable" code to item 34.

State edits of data file prior to NCHS transmission

STATE FILE CONSIDERATIONS

No special considerations.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
AUTOP	1	Alpha character string	Y, N
AUTOPF	1	Alpha character string	Y, N, X

5/4/2001

EDI TRANSMISSION:

No standards set yet.

Item Title: **DID TOBACCO USE CONTRIBUTE TO DEATH?**

Item Number: **35**

Description: Information on the use of tobacco contributing to death.

Source of Information:

    Preferred Source: Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Certifying Physician, Medical Examiner, or Coroner

Check the appropriate box in item 36.

Did tobacco use contribute to death?

☐   Yes
☐   No
☐   Probably
☐   Unknown

Choose "yes" if <u>any</u> use of tobacco or tobacco exposure contributed to the decedent's death.

FOR AN ELECTRONIC RECORD:

EDR Developer

Response for this item is made by selecting one of the choices from the menu list below.

Did tobacco use contribute to the death?

☐   **Yes**
☐   **No**

5/4/2001

□   **Probably**
□   **Unknown**

Instructions to be included in the help function.

Choose "yes" if <u>any</u> use of tobacco or tobacco exposure contributed to the decedent's death.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
TOBAC	Tobacco use contributes to death?	Y	Yes
		N	No
		P	Probably
		U	Unknown

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

The electronic record must contain one of the valid responses indicated above. The field cannot be left blank. Certifier can tab to the next item, but a pending flag for the screen is assigned. When the record is transmitted a final query screen will appear asking that the item be completed at this time. Record cannot be printed or filed until this is complete.

PAPER RECORD

Records filed with this field blank are queried. If no response to query, assign the "Unknown" code.

State edits of data file prior to NCHS transmission

Must be a valid code (see below).

STATE FILE CONSIDERATIONS

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. These

variables do not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
TOBAC	1	Alpha character string	Y, N, P, U

Not necessary to transmit this variable if State does it's own cause-of-death processing and sends NCHS the output from the software.

EDI TRANSMISSION:
No standards set yet.

5/4/2001

Item Title: **IF FEMALE**

Item Number: **36**

Description: An item for females that requests information on the
                 pregnancy status of the deceased woman within the last
                 year of her life**.**

Source of Information:

        Preferred Source: Certifying Physician or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Certifying Physician or Coroner

If the decedent is a female, check the appropriate box in item 36. If the decedent is a
male, leave the item blank.

☐   Not pregnant within the past year
☐   Pregnant at the time of death
☐   Not pregnant, but pregnant within 42 days of death
☐   Not pregnant, but pregnant 43 days to 1 year before death
☐   Unknown if pregnant within the past year

FOR AN ELECTRONIC RECORD:

EDR Developer

*The question will be asked and a screen will appear only if the gender of the deceased is
female and decedent is in the age range 5 to 75 years. A response will be selected from
the menu list below.*

5/4/2001

Menu list

What is the decedent's pregnancy status at the time of death?

- **Not pregnant within the past year**
- **Pregnant at the time of death**
- **Not pregnant, but pregnant within 42 days of death**
- **Not pregnant, but pregnant 43 days to 1 year before death**
- **Unknown if pregnant within the past year**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
PREG	Pregnancy status	1	Not pregnant within the past Year
		2	Pregnant at the time of death
		3	Not pregnant, but pregnant within 42 days of death
		4	Not pregnant, but pregnant 43 days to 1 year before death
		8	Not applicable
		9	Unknown
PREG_BYPASS	Edit flag	0	OFF
		1	ON (verified)
		2	ON (queried but not verified)
PEND36	Pending flag	0	OFF
		1	ON

EDITS:

ELECTRONIC RECORDS

Before the record is transmitted to the State

If sex is male, a "Not applicable" code is automatically entered in the field.

If sex is female and the decedent is less than 5 years of age or greater than 75 years of age the "Not applicable" code is assigned. If the sex is female and the decedent is within

5/4/2001

the age range 5-75 years , the electronic record must contain one of the valid responses indicated above. The field cannot be left blank. The certifier can leave it blank and tab to the next item but a pending flag is placed on the item. When the record is transmitted, a final query screen will appear asking that the item be completed at this time. The record cannot be printed or filed until this is complete.

If the deceased woman is less than 10 years of age or greater than 54 years of age and the response to the item indicates a pregnancy in the past year, a query message will appear indicating a possible incompatibility between this item and the age of the deceased. The certifier is asked to verify or change the response to this item. Since this is an electronic record, the age has already been edited and is assumed to be correct.

Suggested query message:

The deceased is a _____year old female and the response to this item indicates she was pregnant in the year preceding death.

Your response to item 36 was _____

Please verify that the response is correct or enter a new response.   Check one box.

> ☐ **Record is correct**
>
> ☐ **Not pregnant within the past year**
> ☐ **Not pregnant, but pregnant within 42 days of death**
> ☐ **Not pregnant, but pregnant 43 days to 1 year before death**
> ☐ **Pregnant at the time of death**
> ☐ **Unknown if pregnant within the past year**

If the "Record is correct" box is checked, the edit bypass flag is set to "ON-1."

Paper Records

Records with this item completed for a male are assigned the "Not applicable" code.

Records for women between ages 5 and 75 years of age filed with this field blank are queried. If no response to query, assign the "unknown" code.

Age and response edits as indicated above are run. Record is queried if conditions indicate an unlikely combination of age and response to item 36. If record is correct, edit bypass flag is set to "ON-1". If no response to query, set edit bypass to ON-2 (Not verifiable).

The edit bypass variable will always be set to 0 unless changed to reflect an unusual situation (set to 1), or if the data are queried and there is no response, it is set to 2.

State edits of data file prior to NCHS transmission

Must be a valid code (see below).

STATE FILE CONSIDERATIONS

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
PREG	1	character string variable	1-4, 8, 9
PREG_BYPASS	1	character string variable	0-2

EDI TRANSMISSION:

No standards set yet.

Item Titles: **MANNER OF DEATH**
CERTIFIER

Item Numbers: **37 & 45**

Description: An item where the certifying physician, medical examiner or coroner identifies the manner or how the deceased died. (Item 37)

The type of certifier and his/her signature. (Item 45)

Source of Information:

Preferred Source: Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Certifying Physician, Medical Examiner, or Coroner

Always provide a response to manner of death. Indicate "Pending investigation" if the manner of death cannot be determined to be an accident, suicide, or homicide within the statutory time limit for filing the death certificate. This should be changed later to one of the other terms. Indicate "Could not be determined" only when it is impossible to determine the manner of death.

Check the appropriate box.

☐ Natural
☐ Accident
☐ Suicide
☐ Homicide
☐ Pending Investigation
☐ Could not be determined

When the certifier gets to item 45, the appropriate box should be checked and the certifier must sign the certificate.

☐ Certifying Physician
☐ Pronouncing and Certifying Physician

☐   Medical Examiner/Coroner

FOR AN ELECTRONIC RECORD:

EDR Developer

This item is to be completed by making a selection from the menu list.

Menu list

MANNER OF DEATH

Always provide a response to manner of death. Indicate "Pending investigation" if the manner of death cannot be determined to be an accident, suicide, or homicide within the statutory time limit for filing the death certificate. This should be changed later to one of the other terms. Indicate "Could not be determined" only when it is impossible to determine the manner of death.

Select one response:

☐   **Natural**
☐   **Accident**
☐   **Suicide**
☐   **Homicide**
☐   **Pending Investigation**
☐   **Could not be determined**

*NOTE: **In most States, any non-natural death must be certified by a Medical Examiner (ME) or Coroner.** States could have on this screen the referral to the ME or Coroner criteria and ask that the case be referred to the ME or Coroner if the manner of death meets the State's referral criteria.*

Once this item is completed, the following list of choices will appear:

CERTIFIER

You are completing the medical certification as:

☐   **Certifying Physician**
☐   **Pronouncing and Certifying Physician**
☐   **Medical Examiner**
☐   **Coroner**

If natural has been selected for item 37, the certifier will be asked to complete screens for items 46-49, and will be asked to enter his/her electronic signature.

If any response other than natural is selected and the second screen indicates that the certifier is a Medical Examiner or Coroner, the certifier will be asked to complete screens for items 38-44 and 46-49 and will be asked to enter his/her electronic signature.

If any response other than natural is selected and the second screen indicates that the certifier IS NOT a Medical Examiner or Coroner, a message will appear that reads:

> **You have indicated that this is a non-natural death and you are not a certifying ME or Coroner. Should this case be referred to the ME or Coroner of the jurisdiction where the death occurred?**

> ☐ **Yes**
> ☐ **No**
> ☐ **Do not know**

> *Above this list of responses should be the State's criteria for referral to the ME or Coroner.*

If "Yes" is checked, completion of the certificate is terminated and the case referred to the ME or Coroner. Ownership of 1tems 36-39 is then transferred to the ME or Coroner.

The referral could be done electronically by the State system or there could be an instruction message for the Physician to call the ME or Coroner.

If "No" is checked, items 38-44 and then 46-49, will appear.

If "Do not know" is checked, a message with information on whom to contact for advice or a determination should appear.

When the electronic signature is to be entered, the following statements should appear depending on the type of certifier.

Pronouncing and certifying physician

- **To the best of my knowledge death occurred at the time, date, and place, and due to the cause(s) and manner stated.**

Certifying physician

- **To the best of my knowledge, death occurred due to the cause(s) and manner stated.**

Medical Examiner or Coroner

- **On the basis of examination, and/or investigation in my opinion, death occurred at the time, date, and place, and due to the cause(s) and manner stated.**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
MANNER		N	Natural
		A	Accident
		S	Suicide
		H	Homicide
		P	Pending investigation
		C	Could not be determined
CERT		D	Certifying Physician
		P	Pronouncing & Certifying Physician
		M	Medical Examiner/Coroner
		C	Coroner
REF	Refer to ME/Coroner	Y	Yes
		N	No
		U	Unknown
PEND37	Pending flag	0	Off
		1	On

EDITS:

ELECTRONIC RECORDS

Before the record is transmitted to the State

Item 37. Certifier can tab to another screen and pend the item. When this occurs, a screen will automatically appear at the time the record is to be printed or filed, which indicates that the item must be completed at this time. The item cannot be blank. Record cannot be printed or filed unless there is a valid response to the item.

Item 45 cannot be blank. See item 37 above for how to handle if certifier tries to leave it blank.

If item 37 is any response but natural, item 45 should be medical/examiner or coroner unless cause, manner, and timing of death meet State criteria for an exception. States will have to determine.

If response to item 37 is pending investigation, a follow up flag is set to "On."

If death requires referral to the ME or Coroner, no electronic signature will be allowed and no other items can be filled out until item 31 is changed to indicate referral to an ME or Coroner.

PAPER RECORDS

Records with item 37 completed with anything other than "Natural" should be reviewed to ensure that a ME or Coroner was either contacted or did certify the death. If not, the case may be referred to the ME or Coroner in the district where the death occurred, depending on State requirements. Otherwise, the certificate should be accepted.

Records filed with item 37 blank are queried. The certifier must make a determination. If the certifier cannot make a determination as to manner of death after a complete investigation has been conducted and certifier is a ME or Coroner, "Could not be determined" should be checked. If certifier is not a ME or Coroner, the case must be referred to a ME or Coroner or otherwise handled according to State law.

If response to item 37 is "Natural" but cause of death is an accident, suicide, or homicide, State may query certifier to determine if "Natural" is correct.

If response to item 37 is pending investigation, a follow up flag is set to "On."

State edits of data file prior to NCHS transmission

See above edits for electronic records.

Must be valid codes (see below).

If item 37 indicates the manner of death as "Natural," then there can be (but is unlikely) an external cause-of-death code. If this occurs, the external cause is most likely in part II of the cause-of-death section. If the manner is accident, suicide, or homicide, then there must be an external cause of death. If manner of death could not be determined, any cause-of-death code is acceptable. If the cause of death is pending investigation, then the manner of death should be listed as pending.

STATE FILE CONSIDERATIONS

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. These

variables do not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
MANNER	1	Alpha character string	N, A, S, H, P, C
CERT	1	Alpha character string	D, P, M, C

Not necessary to transmit MANNER if State does it's own cause-of-death processing and sends NCHS the output from the software.

EDI TRANSMISSION:

No standards set yet.

Item Title: **DATE OF INJURY**
                TIME OF INJURY

Item Number: **38 & 39**

Description: Actual or presumed date of injury
                Actual or presumed time of injury

Source of Information:

    Preferred Source: Medical Examiner or Coroner
    Other Acceptable Source: Other Certifying Physician (depending on
                    State law)

INSTRUCTIONS

FOR A PAPER RECORD:

Medical Examiner, Coroner, or Certifying Physician

If the death of this person involved an injury of any kind as indicated in item 32, either in parts I or II, complete items 38-44. If no injury is involved, leave items 38, 39, 41-44 blank. Go to item 45.

Print or type the month (spelled out), day, and four-digit year of injury.

Estimates may be provided with "Approx." placed before the date or time.

Print or type the hour and minute of injury. Use a 24-hour clock.

Remember, the date of injury may differ from the date of death.

FOR AN ELECTRONIC RECORD:

EDR Developer

It is proposed that Date of Injury be a three-field entry with the month, day, and year entered in separate fields.

Below are suggestions for these items:

5/4/2001

DATE OF INJURY

Did the death of this person involve an injury of any kind as indicated in item 32, either in part I or part II?

☐   **Yes**
☐   **No**

If the "Yes" box is checked and if the case had been referred to a Medical Examiner or Coroner, the Certifer will proceed to complete items 38-44. If the "Yes" boxed is checked, and the case had not been referred to the ME or Coroner, the following message appears:

This case involved an injury and was not referred to the Medical Examiner/Coroner. _____ State law/rules require that ………..

Do you want to refer this case to the Medical Examiner/Coroner?

☐   **Yes**
☐   **No**

If "Yes" is checked, item 31 is put in pending status and this item will be the first screen to appear when a certifier continues to complete the certificate.

If the answer is "No," the certifier is allowed to proceed.

If the "No" box is checked in the first screen, all the injury items are skipped and the next item to appear on the screen is item 45.

Check this box if date of injury cannot be determined.

☐   **Date of injury cannot be determined**

If checked, set all fields to 9's.

If Date of Injury cannot be determined, skip item 39 (Time of Injury). Go to item 40 (Place of Injury). Automatically set Time of Injury to "cannot be determined."

If part of the date is known, for example month and year, enter month and year and leave day blank. All blanks are automatically set to 9's when at least one part of the date is completed.

When the month is to be entered, the following instruction should appear:

Enter the FULL name of the month of injury.

> **Name of the month of injury** _____
> **Day of injury**_____
> **Year of injury**_____

It is proposed that the time of injury be a single-field entry for hour and minutes.

TIME OF INJURY

Check this box if the time of injury cannot be determined.

☐   **Time of injury cannot be determined.**

If checked, set all fields to 9's.

Enter the exact hour and minutes of injury or use your best estimate.

> **Hour and minute of injury (use 24-hour clock)** _____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DOI_YR	Year of injury	4-digit year 9999	must be less than or equal to system year.
DOI_MO	Month of injury	January February March April May June July August September October November December	
		All 9's	Unknown
DOI_DY	Day of injury	01-31	If January
		01-29	If February
		01-31	If March

	01-30	If April
	01-31	If May
	01-30	If June
	01-31	If July
	01-31	If August
	01-30	If September
	01-31	If October
	01-30	If November
	01-31	If December
	99	Unknown

TOI_HR	Time of injury	0000-2359	
		Or	
		0001-2400	
		All 9's	Unknown

EDITS:

Before the record is transmitted to the State.

Some facilities may use a 0001-2400 range in lieu of the 0000-2359 range. The only difference between these systems is in how the beginning of the new day, midnight (or 12:00 am using the 12-hour clock) to 59 seconds after midnight (12:00:59 am) is represented. For medical facilities, the commonly used sequence is:
2359 (11:59 pm)
0000 (12:00 am)
0001 (12:01 am)

However, for the military (but not necessarily military medical institutions) the sequence is:
2359 (11:59 pm)
2400 (12:00 am)
0001 (12:01 am).

If month is February and day is 29, year must be a leap year.

If any edits fail, a message will appear that shows the date and time information entered and a comment on invalid entries. These errors must be corrected before the record can be submitted.

States also need to compare the date of injury fields to be sure it is earlier or equal to the date of death.

SAMPLE ERROR MESSAGE AND QUERY SCREEN

One of the date entries is incorrect or inconsistent with other date entries. Please review and make any necessary changes.

ITEM NUMBER	FIELD	ENTRY	COMMENTS
29	Month	September	
29	Day	31	Day is greater than 30
29	Year	2002	
30	Time of Death	1748	
38	Month	September	
38	Day	30	
38	Year	2003	Year of injury must be before death
39	Time of Injury	1748	

Before transmittal to NCHS

The cause-of-death codes need to be examined to see if there is at least one external cause in either part I or part II of the certificate (item 32). If there is at least one external cause and item 38 contains all blanks, query the certifier to resolve.

If there are no external causes indicated in part I or part II of item 32, set all the injury items (items 38-44) as blanks.

STATE FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date, it is recommended that the date be entered and stored as three separate fields. Time should be stored as a separate field.

TRANSLATIONS:

States will need to translate the written months into numeric values as follows:

January	01
February	02
March	03
April	04
May	05
June	06
July	07

August	08
September	09
October	10
November	11
December	12

If states elect to use a database system that has an option of storing dates as "date type variables," the system must meet the criteria listed under transmission standards.

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. These variables do not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	**LENGTH**	**TYPE**	**VALUES**
DOI_YR	4	Numeric character string	4-digit year, 9999
DOI_MO	2	Numeric character string	01-12, 99
DOI_DY	2	Numeric character string	01-31, 99
TOI	4	Numeric character string	0000-2400, 9999

EDI TRANSMISSION:

HL 7 Transmission standards will be followed.

Format   YYYY[MM[DD[HH[mm]]]]

Year must be fully represented with four digits.
Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

5/4/2001

Item Title: **PLACE OF INJURY**

Item Number: **40**

Description: Requests information on the type of place where
                 an injury occurred

Source of Information:

   Preferred Source: Medical Examiner or Coroner
   Other Acceptable Source: Certifying Physician (depending on State law)

INSTRUCTIONS

FOR A PAPER RECORD:

Medical Examiner, Coroner, or Certifying Physician

This item is to be completed if an injury is listed in either part I or part II of item 32. This item is to be completed if the manner of death (item 37) is an accident, suicide, or homicide.

Certifier is to enter the type of place where the injury occurred, examples include home, construction site, restaurant, wooded area, vacant lot.

This item cannot be left blank. If unknown, enter "Unknown."

 Print or type the general type of place of injury in item 40.

FOR AN ELECTRONIC RECORD:

EDR Developer

Gateway to this item is through item 38. If item 38 contains any entries other than all blanks, item 40 should be completed.

When the item is to be completed the following instructions should appear on the screen:

PLACE OF INJURY

- **Enter the type of place where the injury occurred, examples include home, construction site, restaurant, wooded area, vacant lot.**

- **This item cannot be left blank. If unknown, enter "unknown."**

Place of injury_____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
INJPLL	Place of injury literal	Literal	
INJPL	Place of injury	0	Home
		1	Residential Institution
		2	School, Other Institution, Administrative Area
		3	Sports & Athletics Area
		4	Street/Highway
		5	Trade and Service Area
		6	Industrial & Construction
		7	Farm
		8	Other Specified Place
		9	Unspecified Place
		blank	Blank

The literal values are to be transmitted to NCHS or put through the automated software for processing cause-of-death data.

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORDS

If item 37 response is accident, suicide, or homicide, there must be an entry in item 40.

If item 38 contains any valid part of a date (not all blanks), this item must have an entry.

5/4/2001

PAPER RECORDS

If item 37 response is "accident," "suicide," or "homicide," there must be an entry in item 40.

If item 38 contains any valid part of a date (not all blanks), this item must have an entry.

If there is a response in item 40 and no indication that an injury is recorded in item 32, either in part I or in part II, query.

If item 37 (manner of death) is natural, then item 40 should be (but is not always) blank. If not blank and examination of the cause of death indicates a natural death, query.

State edits of data file prior to NCHS transmission

Codes (INJPL) are compared to ICD-10 codes. Allowable Place of Injury codes for specified ICD-10 codes are found in Table J of the NCHS instruction manual part 11.

If there is a Place of Injury code and the ICD-10 codes (underlying or multiple) do not include at least one of the codes listed in table J, the record must be queried for cause of death and place of injury.

If the Place of Injury code is valid but is not valid for a specific ICD-10 cause code, then set INJPL code to "Unknown."

STATE FILE CONSIDERATIONS

States should record the literal entry, both for certification purposes and for processing cause of death. It is recommended that States use the code structure in Appendix E to code these records through an electronic table look-up to help assure good data quality. Any specified place not contained in the table will be coded to "Unspecified known place." A response of "Unknown" will be coded to "Unknown." States may wish to expand these codes for State use of these data in combination with ICD codes for public health injury prevention initiatives.

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. These variables do not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
INJPLL	50	Alpha character string	literal
INJPL	1	Numeric character string	0-9, blank

Not necessary to transmit these variables if State does it's own cause-of-death processing and sends NCHS the output from the software.

EDI TRANSMISSION:

No standards set yet.

Item Title: **INJURY AT WORK?**

Item Number: **41**

Description: Information on whether or not an injury to the deceased
                     indicated on the death certificate occurred at work.

Source of Information:

    Preferred Source: Medical Examiner or Coroner
    Other Acceptable Source: Certifying Physician (depending on State law)

INSTRUCTIONS

FOR A PAPER RECORD:

Medical Examiner, Coroner, or Certifying Physician

The Injury at Work item must be completed if the Manner of Death item (37) is "accident,"
"suicide," or "homicide" and/or there is an injury recorded in item 32, either in part I or part
II, and the decedent is 14 years of age or older. If the decedent is less than 14 years of age,
item 41 may be completed or left blank.

An injury at work could occur at work regardless of whether the injury occurred in the
course of the decedent's "usual" occupation.

Check the appropriate box in item 41. For examples, see instructions on death certificate.

                ☐ Yes
                ☐ No

If it is not known if injury was at work, write "Unknown."

FOR AN ELECTRONIC RECORD:

EDR Developer

The injury at work item must be completed if accident, suicide, or homicide is selected in
item 37 and/or any injury is mentioned in item 32, either parts I or II, and the decedent is
14 years of age or older. If the decedent is less than 14 years of age, the item may be
completed if warranted.

5/4/2001

The gateway for appearance of this item on the EDR is through item 38 (Date of injury). If item 38 contains anything but all blanks, and the decedent is 14 years of age or older, the injury at work screen will appear.

If decedent is less than 14 years of age and item 38 is not all blanks, the following will appear:

The decedent is less than 14 years of age. Completion of this field is appropriate only if the injury occurred at work. Check one of the two boxes below.

□ **Completion not warranted**
□ **Continue with completion of this item**

If the first box is selected, the item will automatically be coded to the "Not applicable" code.

If the second box is selected, the item will appear.

Injury at Work?

□ **Yes**
□ **No**
□ **Unknown**

The following two statements should appear on the screen when the injury at work item is to be completed.

An injury at work could occur at work regardless of whether the injury occurred in the course of the decedent's "usual" occupation.

If you would like to view examples of injuries at work or injuries that should not be considered injuries at work please see the help menu.

EXAMPLES FOR THE HELP FUNCTION:

View examples of injuries at work

□ **Injury while working or in vocational training on job premises**
□ **Injury while on break or at lunch or in parking lot on job premises**
□ **Injury while working for pay or compensation, including at home**
□ **Injury while working as a volunteer law enforcement official etc**.
□ **Injury while traveling on business, including to and from business contacts**

☐ **Please check this response to complete the injury at work screen**

View examples of injuries that should not be considered injuries at work

☐ **Injury while engaged in personal recreational activity on job premises**
☐ **Injury while a visitor (not on official work business) to job premises**
☐ **Homemaker working at homemaking activities**
☐ **Working for self for no profit (mowing yard, repairing own roof, hobby)**
☐ **Student in school**
☐ **Commuting to or from work**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
WORKINJ	Injury at work?	Y	Yes
		N	No
		U	Unknown (not classifiable)
		X	Not applicable

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORDS

Electronic record must contain one of the valid responses indicated above. Certifer can leave blank and tab to the next item, but a pending flag will be set. If item is left blank, before the record can be transmitted a screen will appear asking that the item be completed at this time. Record cannot be printed or filed until this item is complete. If "Not warranted" is selected, item 41 will be coded to "Not applicable." If the item is skipped due to skip pattern initiated in item 38, item will be automatically assigned the "Not applicable" code.

PAPER RECORDS

Records should be queried if the injury at work item is blank when manner of death is accident, suicide, or homicide and/or there is an injury noted in item 32, part I or part II, and the decedent is 14 years of age or greater. If no response to query, assign the "Unknown" code.

If manner of death is natural and an external cause of death is indicated in the cause-of-death section, query the record for cause of death, manner of death, and all appropriate items in the range of items numbers 37-44. If no response, code to "Unknown."

State edits of data file prior to NCHS transmission

Must be a valid code (see below).

If response is coded to Y (Yes), the record must have an external cause of death code in either Part I or Part II of item 32. If the edit fails, query.

STATE FILE CONSIDERATIONS

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. This variable does not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
WORKINJ	1	Alpha character string	Y, N, U, X

Not necessary to transmit this variable if State does it's own cause-of-death processing and sends NCHS the output from the software.

EDI TRANSMISSION:

No standards set yet.

5/4/2001

Item Title: **LOCATION OF INJURY**

Item Number: **42**

Description: The geographic location where the injury occurred**.**

Source of Information:

Preferred Source: Medical Examiner or Coroner
Other Acceptable Source: Certifying Physician (depending on State law)

INSTRUCTIONS

FOR A PAPER RECORD:

Medical Examiner, Coroner, or Certifying Physician

Item must be completed if response to item 37 is "accident," "suicide," or "homicide," and/or there is an injury recorded in item 32, part I or part II.

Item must be completed if item 38 has any entry other than blank.

This is the address where the injury occurred. Fill in as many of the items as is known. If any of the location fields are not known, leave blank.

Location-Street Address & Apt Number

If the "street" name has a direction as a prefix, print the prefix prior to the name. If the "street" name has a direction after the name, print the suffix after the name.

Examples: South Main Street
Walker Street NW

Print or type the building number.

Print or type the "street" name including and pre-or post-directionals and the "street designator." Examples of the street designator are words like street, avenue, road, circle, court, etc.

Print or type the apartment or room number.

Location-State

Print or type the USA State or territory or Canadian province where the injury occurred.

Location -City or Town

Print or type the name of the city, town, or other place where the injury occurred.

Location-zip code

Print or type the 9 digit zip code.

FOR AN ELECTRONIC RECORD:

EDR Developer

Item must be completed if response to item 37 is accident, suicide, or homicide, and/or there is an injury recorded in item 32, part I or part II.

Item must be completed if item 38 has an entry other than blank.

Suggested method

The following instruction should appear when the item is to be completed.

Location of Injury

This is the address where the injury occurred. Fill in as many of the items as is known. If any of the location fields are not known, leave blank.

If none of the location items are known, check the "Location unknown" box below.

☐ **Location unknown**

If this box is checked, all items are assigned the "Unknown" code.

Preferred method for recording street address.

If the "street" name has a direction as a prefix, enter the prefix in the space labeled "pre-directional." If the "street" name has a direction after the name, enter the suffix in the space labeled "post-directional."

> *Examples: South Main Street. Enter the name as Main and the pre-direction as South.*

Walker Street NW. Enter the name as Walker and NW in the post-directional space.

If there are no pre-or post-directions, leave these spaces blank.

Second option for recording street address

If the "street" name has a direction as a prefix, enter the prefix as part of the "street" name and in front of the name. If the "street" name has a direction after the name, enter the suffix after the "street" name.

Examples: South Main Street. Enter the name as South Main.
Walker Street NW. Enter the name as Walker NW.

Location-Street Address & Apt Number

Preferred option

Building number_____
Pre-directional_____
Name of the "street"_____
"Street" designator _____
Post-directional _____
Apartment or room number_____

Second Option

Building number_____
Name of the "street"_____
"Street" designator _____
Apartment or room number_____

Examples of the "street" designator are words like street, avenue, road, circle, court, etc.

Location-State

USA State or territory or Canadian province where the injury occurred.

_____(State, territory, province)

Location -City or Town

Name of the city, town, or other place where the injury occurred.

_____(city, town or other place)

Location-Zip Code

   9 digit ZIP code. _____

   All blank fields will be assigned the "Unknown" code.

PROCESSING VARIABLES:

NAME	**DESCRIPTION**	**VALUES**	**DEFINITION**
ISTNUM	Street number		
IPREDIR	Pre-directional		
ISTNAME	Street name		
ISTDESIG	Street designator		
IPOSTDIR	Post-directional		
IUNUM	Unit or apartment number		
IPNAME	City or town name		
IZIP9	Zip code		
ISTATE	State or Province		

EDITS:

Before the record is transmitted to the State

1. If city is known and State is unknown, then use a listing of cities to assign a State if and only if the city is unique. Otherwise leave blank.

2. Check city and town names in FIPS 55 name table. If not in table and if it is an electronic record, the following message should appear:

   "**The city or town was not found, please enter again.**"

   If the edit fails again, code city to "Unknown." Keep the literals.

STATE FILE CONSIDERATIONS

It is recommended that States keep this information in as detailed a format as possible. See the recommended electronic format below. For data collected on paper records, keying instructions need to reflect the detail of the electronic record.

5/4/2001

For the purpose of recording and printing certified copies from the electronic file and for geo-coding the record, it is recommended that the address field be separated into the fields as described below. These fields generally correspond to the CDC-HISSB recommendations. However, field lengths do not correspond to the CDC-HISSB standards because the literal entries need to be captured. They can then be transposed to abbreviations for purposes of compacting the file using standard abbreviations as recommended in the HISSB standards.

Suggested field names are:

DESCRIPTION	NAME	LENGTH
Street number	ISTNUM	10
Pre-directional	IPREDIR	10
Street name	ISTNAME	28
Street designator	ISTDESIG	10
Post-directional	IPOSTDIR	10
Unit or apartment number	IUNUM	4
City or town name	IPNAME	28
Zip code	IZIP9	9
State or Province	ISTATE	28

States may also opt to retain coded fields as well as the literal entries. If coded fields are maintained as well, there are HISSB and ISO standards that should be used. City codes are shown in Appendix C. State and Province codes will be two-character postal codes for the USA and its territories, and two-character codes for the provinces and territories of Canada (see Appendix D).

NCHS TRANSMISSION FILE

It is not anticipated that these variables will be transmitted to NCHS. The recommendations are for States that may want to geo-code these locations for injury prevention and analysis purposes.

EDI TRANSMISSION:

No standards set yet.

Item Title: **DESCRIBE HOW INJURY OCCURRED**

Item Number: **43**

Description: Information on how the injury occurred is requested in narrative form.

Source of Information:
    Preferred source: Medical Examiner or Coroner
    Other Acceptable Source: Certifying Physician (depending on State law)

INSTRUCTIONS

FOR A PAPER RECORD:

Medical Examiner, Coroner, or Certifying Physician

Item is to be completed if response to item 37 is accident, suicide, or homicide and/or there is an injury reported in item 32, part I or part II. If item 38 contains any part of a date, this item is to be completed.

Certifier is to print or type in narrative form a description of how the injury occurred.

When relevant to injury, specify the type of gun (e.g., handgun, hunting rifle) or type of vehicle (e.g., automobile, pickup truck, bulldozer, train). If more than one vehicle was involved, specify number and types of vehicles and which vehicle the decedent was in.

This item cannot be left blank. If not known, enter "Unknown."

FOR AN ELECTRONIC RECORD:

EDR Developer

Gateway to this item is through item 38 (Date of Injury). If Item 38 contains any part of a date, this item is to be completed.

Also, item is to be completed if response to item 37 is "accident," "suicide," or "homicide" and/or there is an injury reported in item 32, part I or part II.

SUGGESTED METHOD

The following instructions should appear when this item is to be completed:

DESCRIBE HOW THE INJURY OCCURRED

Certifier is to enter in narrative form a specific description of how the injury occurred.

When relevant to injury, specify the type of gun (e.g., handgun, hunting rifle) or type of vehicle (e.g., automobile, pickup truck, bulldozer, train). If more than one vehicle was involved, specify number and types of vehicles and which vehicle the decedent was in.

This item cannot be left blank. If not known, enter "Unknown."

Please describe how the injury occurred.

_____
_____
_____
_____
_____

Once this item is completed, the following menu of choices will appear:
The instruction should appear along with the menu of choices.

ACTIVITY

From the following list of activities, choose the one activity that best describes the activity the deceased was engaged in when the injury occurred.

- ☐ **While engaged in sports activities**
- ☐ **While engaged in leisure activities**
- ☐ **While working for income**
- ☐ **While engaged in other types of work**
- ☐ **While resting, sleeping, eating or engaging in other vital activities**
- ☐ **While engaged in activities not listed above**
- ☐ **While engaged in unknown activity**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
INACT	Activity	0	While engaged in sports activity
		1	While engaged in leisure activities
		2	While working for income
		3	While engaged in other types of work
		4	While resting, sleeping, eating, or engaging in other vital activities
		8	While engaged in other specified activities
		9	During unspecified activity
LINJURY		Literal	

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORDS

None at this time.

PAPER RECORDS

None at this time.

State edits of data file prior to NCHS transmission

Must be valid codes (see below).

STATE FILE CONSIDERATIONS

States should record the literal entry for the injury description and maintain that entry in their electronic file for certification purposes as well as for automated cause-of-death processing. States will need a literal field of at least 250 characters for this entry. In addition, key word lookup software to identify the activities will be needed for paper record systems (see Appendix F for detailed list of activities).

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. These variables do not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	**LENGTH**	**TYPE**	**VALUES**
INJACT	1	Numeric character string	0-9
LINJURY	250	Alpha character string	literal

Not necessary to transmit these variables if State does it's own cause-of-death processing and sends NCHS the output from the software.

EDI TRANSMISSION:

No standards set yet.

Item Title: **IF TRANSPORTATION ACCIDENT, SPECIFY**

Item Number: **44**

Description: Information on the role of the decedent involved in a transportation accident.

Source of Information:

    Preferred Source: Medical Examiner or Coroner
    Other Acceptable Source: Certifying Physician (depending on State law)

INSTRUCTIONS

FOR A PAPER RECORD:

Medical Examiner, Coroner, or Certifying Physician

Check the box that best describes the role of the decedent in the transportation accident. This item cannot be left blank. If unknown, print or type in "Unknown."

☐   Driver/Operator
☐   Passenger
☐   Pedestrian
☐   Other (Specify)_____

"Other (Specify)" applies to anything to do with watercraft or with aircraft, anything having to do with animals, (e.g., rider), anything to do with persons who have attached themselves to the outside of vehicles but are not <u>bonafide</u> passengers or drivers (e.g., "surfers.")

FOR AN ELECTRONIC RECORD:

EDR Developer

The gateway for this item is through item 38.

The instructions should appear when the item is to be completed using the list of choices below:

Transportation Accident

Certifier is to enter the role of the decedent in the transportation accident.

This item cannot be left blank. If unknown, check the "Unknown" button.

"Other (Specify)" applies to anything to do with watercraft or with aircraft, anything having to do with animals, (e.g., rider), anything to do with persons who have attached themselves to the outside of vehicles but are not <u>bonafide</u> passengers or drivers (e.g., "surfers.")

☐   **Driver/Operator**

☐   **Passenger**

☐   **Pedestrian**

☐   **Other (Specify)**

☐   **Unknown**

☐   **Not applicable**

If the "Other (Specify)" response is selected, the following message appears:

Please enter the other role of the decedent in the transportation accident.

_____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
TRANSP	Role of the decedent in the traffic accident		
		1	Driver/Operator
		2	Passenger
		3	Pedestrian
		4	Other

5/4/2001

	8	Unknown
	9	Not Applicable
TRANSPL	Other (specify)	Literal

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORDS

If a vehicle is involved (see Appendix K) in the injury as recorded in item 43, a response to item 44 is required.

PAPER RECORDS

If a vehicle is involved (see Appendix K) in the injury as recorded in item 43, a response to item 44 is required.

If there is a response in item 44 but no indication of a transportation accident in item 43 or in item 32, part I or part II, query. If no response to query, code to "Not applicable."

If item 44 is blank and a transportation accident is indicated in item 43 or item 32, part I or part II, query. If no response to query, assign the "Unknown" code.

State edits of data file prior to NCHS transmission

Must be a valid code (see below).

STATE FILE CONSIDERATIONS

It is recommended that States record the literal entry for the "Other (Specify)" entry and maintain that entry in their electronic file for certification purposes.

The outputs from the EDR can interface with the NCHS software for processing cause-of-death data (ACME, TRANSAX, MICAR, and SuperMICAR). This can be done using the input file record format for the highest-end program that the State uses. These variables do not need to be transmitted to NCHS if the information has been fed through the automated software and the output files have been transmitted to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	**LENGTH**	**TYPE**	**VALUES**
TRANSP	1	Numeric character string	1, 2, 3, 4, 8, 9
TRANSPL	30	Alpha character string	Literal

Not necessary to transmit these variables if State does it's own cause-of-death processing and sends NCHS the output from the software.

EDI TRANSMISSION:

No standards set yet.

Item Title: **DECEDENT'S EDUCATION**

Item Number: **51**

Description: The highest degree or level of schooling completed by
                  the decedent.

Source of Information:

       Preferred Source: Informant

INSTRUCTIONS

FOR BOTH PAPER AND ELECTRONIC RECORDS:

Funeral Director

Hand the informant the education level selection card (Appendix G) and ask the informant to choose the category that, to the best of his or her knowledge, describes the highest education level achieved by the decedent. If the respondent does not know or is not sure, select "Unknown" (electronic) or type or print "Unknown" (paper). If the respondent refuses, select "Refused" (electronic) or type or write in the box "Refused" (paper). If there is no informant, or for some other reason the information is not available, select "Not Obtainable" (electronic) or type or write in the box "Not available" (paper).

For electronic records, select the response that the informant gives you. For example, if the respondent answers "high school," select "High school graduate or GED completed." For a paper record, mark the correct check box.

If the respondent indicates that the decedent has a degree that is not listed on the card, select "Not Classifiable." On a paper record, write in "Not Classifiable."

IN NO CASE SHOULD THE ITEM BE LEFT BLANK

FOR AN ELECTRONIC RECORD:

EDR Developer

Decedent's education level is chosen from the list below and the instructions should appear when the item is to be completed.

5/4/2001

Decedent's Education

Check the box that best describes the highest degree or level of school completed by the decedent.

□ **8th grade or less**

□ **8th grade or less**
□ **9th-12th grade; no diploma**
□ **High school graduate or GED completed**
□ **Some college credit, but no degree**
□ **Associate degree (e.g. AA, AS)**
□ **Bachelor's degree (e.g. BA, AB, BS)**
□ **Master's degree (e.g. MA, MS, MEng, MEd, MSW, MBA)**
□ **Doctorate (e.g. PhD, EdD) or Professional degree (e.g. MD, DDS, DVM, LLB, JD)**

□ **Refused**
□ **Not Obtainable**
□ **Unknown**
□ **Not Classifiable**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DEDUC	Education	1	8th grade or less
		2	9th through 12th grade; no diploma
		3	High school graduate or GED completed
		4	Some college credit, but no degree
		5	Associate degree (e.g., AA, AS)
		6	Bachelor's degree (e.g., BA, AB, BS)
		7	Master's degree (e.g., MA, MS, MEng, Med, MSW, MBA)
		8	Doctorate degree (e.g., PhD, EdD) or professional degree (e.g., MD, DDS, DVM, LLB, JD)
		9	Unknown

5/4/2001

DEDUC_MVR	Companion missing value variable		
		S	Sought but unknown (informant does not know)
		R	Refused (informant refuses)
		C	Not obtainable (no informant or e.g. found unidentified body)
		E	Obtained but response does not fit classification scheme
DEDUC_BYPASS	Edit flag	0	OFF (edit passed)
		1	ON (edit failed, data queried and verified)
		2	ON (edit failed, data queried but not verified)
		3	ON (edit failed, review needed)
		4	ON (edit failed, query needed) (paper only)

If "Refused," "Not Obtainable," "Unknown," or "Not Classifiable" is selected, assign the appropriate code for DEDUC_MVR (above) and the value "9" to DEDUC.

EDITS:

Before the record is transmitted to the State

At the time of input to an EDR or electronic work sheet, the date of death will be entered by the funeral director. The decedent's age will be calculated and stored as a temporary variable for the purposes of this edit. It will be replaced when the Date of Death (Item 29) is completed by the certifying physician/coroner and a new age will be calculated.

Age checks should use calculated age. If age/education edit indicates a discrepancy, the education information needs to be reviewed. The calculated and reported age should have already been checked for consistency.

Valid codes 1-8 (See processing variables for detail)

Values	Minimum Age
1	None
2	9
3	16
4	17

5	18
6	20
7	21
8	23
9	None

If DEDUC is "9," must have a valid missing value companion variable code if states elect to have a missing value variable. (See State file considerations section.)

SAMPLE ERROR MESSAGE AND QUERY SCREEN

The data entered in the electronic certificate indicates an unusual level of education for a decedent of this age.

Decedent's education level is: _____

Please check one of the boxes below.

☐ **Incorrect**
☐ **Correct**
☐ **Not able to verify**

If "Correct" is checked, the bypass flag is set to ON-1.

If "Not able to verify" is checked, the bypass flag is set to ON-2.

If "Incorrect" is selected, pull up the decedent's education level selection list and ask that an education level be selected. If the edit fails, reset bypass flag to ON-1. If the edit passes, reset bypass flag to OFF-0.

Edit bypass flags

ELECTRONIC RECORD

Edit bypass is defaulted to OFF-0 and remains as such unless changed through the edit screen responses. Bypass flag is reset to OFF-0 if new data are entered through the edit/query process and they pass the edit.

When the edit is run and the item fails the edit, the bypass flag is set to a value of ON-3 (see detail above). If the data pass the edit, the bypass flag remains OFF–0.

If the edit fails and the funeral director is unable to verify the data then he/she should indicate "Not verifiable" and the edit bypass flag is set to ON-2. The companion missing value variable (DEDUC_MVR) is set to "E."

If the edit fails and the funeral director checks "Correct," the edit bypass flag is set to ON –1.

If "Not correct" is selected and the edit still fails after the funeral director selects an education level from the list, the bypass flag is set to ON-1.

PAPER RECORD

The initial edit will catch only keying errors. If the edit fails, the bypass flag is set to ON-3 and a message appears indicating a discrepancy between age and education. The keyer is asked to re-enter the data. If the edit passes, the bypass flag is reset to OFF-0. If the data still fail the edit, the bypass flag is set to ON-4 meaning that a query to the funeral director is needed.

If the edit fails and the funeral director verifies the data, the edit bypass flag is set to ON –1.

If the edit fails and the funeral director is unable to verify the data, the edit bypass flag is set to ON-2. The companion missing value variable (DEDUC_MVR) is set to "E."

STATE FILE CONSIDERATIONS

State files will need a field for the education variable and an edit bypass flag variable. Because of the possibility of responses such as "Refused," "Not known," and "Not obtainable," a missing value variable (DEDUC_MVR) is recommended to keep track of these responses for intervention or follow-up training as appropriate. The companion missing value variable (DEDUC_MVR) is described in the processing variable section.

The education item represents the highest number of years of formal education completed and is recorded as a numeric value. Most states currently edit this item only for valid codes; others do a cross-edit with age. The most common edit is age minus education level should be greater than or equal to 4. The new certificate has categories of education indicating the highest level of education achieved or degree received. It will no longer be a numeric value and mapping from the old values to the new categories is not one-to-one.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
DEDUC	1	Numeric character string	1, 2, 3, 4, 5, 6, 7, 8, 9

DEDUC_BYPASS   1   Numeric character string   0, 1, 2, 3, 4

EDI TRANSMISSION:

No standards set yet.

Item Title: **DECEDENT OF HISPANIC ORIGIN?**

Item Number: **52**

Description: The Hispanic origin of the decedent.

Source of Information:

      Preferred Source: Informant

INSTRUCTIONS

FOR BOTH PAPER AND ELECTRONIC RECORDS:

Funeral Director

ASK: Please look at this card and tell me which response best describes the Hispanic origin of _____.

PAPER RECORD

Funeral Director

Hispanic refers to people whose origins are from Spain, Mexico, or the Spanish-speaking Caribbean Islands or countries of Central or South America. Origin includes ancestry, nationality, and lineage. There is no set rule about how many generations are to be taken into account in determining Hispanic origin; it may be based on the country of origin of a parent, grandparent, or some far-removed ancestor. Other Hispanic groups may be specified under "other."

Based on the informant's response, check the appropriate boxes in the listing on the certificate. If informant chooses more than one response, mark all boxes that apply; for example "Mexican" and "Cuban," choose both responses. If the respondent indicates an ethnic origin not on the list, it should be recorded in the "Specify" space. Enter the informant's response even if it is not a Hispanic origin.

      ☐   No, Not Spanish/Hispanic/Latino

      ☐   Yes, Mexican, Mexican American, Chicano

      ☐   Yes, Puerto Rican

      ☐   Yes, Cuban

☐   Yes, Other Spanish/Hispanic/Latino
(Specify)_____

If the informant does not know, print "Unknown."

If there is no informant, print "Not obtainable."

If respondent refuses, print "Refused."

ELECTRONIC RECORD:

EDR Developer

Hispanic origin will be selected from a menu list (below). The instructions should appear with the menu.

Hispanic refers to people whose origins are from Spain, Mexico, or the Spanish-speaking Caribbean Islands or countries of Central or South America. Origin includes ancestry, nationality, and lineage. There is no set rule about how many generations are to be taken into account in determining Hispanic origin; it may be based on the country of origin of a parent, grandparent, or some far-removed ancestor. Other Hispanic groups may be specified under "other."

Based on the informant's response, select the appropriate responses from the following menu. If the respondent chooses more than one response, for example Mexican and Cuban, choose both responses. If the respondent indicates an ethnic origin not on the list, it should be recorded in the "Specify" space. Enter the informant's response even if it is not an Hispanic origin.

<div align="center">

DECEDENT OF HISPANIC ORIGIN

</div>

☐ **No, not Spanish/Hispanic/Latino**

☐ **Yes, Mexican, Mexican American, Chicano**

☐ **Yes, Puerto Rican**

☐ **Yes, Cuban**

☐ **Yes, Other Spanish/Hispanic/Latino**

☐ **Unknown if Spanish/Hispanic/Latino**

☐ **Not obtainable**

☐ **Refused**

If "Yes, Other Spanish/Hispanic/Latino" is selected, the following message will appear:

Please enter the specified "Other Hispanic" origin.

Other:_____

States may give examples of the largest "Other Hispanic" origin groups for that State.

Because informants may report more than one ethnicity, there needs to be a separate field for each of the 4 categories plus a 20-character field in which to enter the "Other (Specify)" response.

When the "No, not Spanish/Hispanic/Latino" response is chosen, each of the Hispanic origin fields will be automatically coded with the "No, not Hispanic" code. When the keyer moves to another item and at least one Hispanic category is selected, all the Hispanic selections that were not chosen will be automatically coded with the "No, not Hispanic" code.

PROCESSING VARIABLES:

NAME	**DESCRIPTION**	**VALUES**	**DEFINITION**
DETHNIC1	Mexican, Mexican American or Chicano	N H U	No, not Mexican Yes, Hispanic Unknown
DETHNIC2	Puerto Rican	N H U	No, not Puerto Rican Yes, Hispanic Unknown
DETHNIC3	Cuban	N H U	No, not Cuban Yes, Hispanic Unknown
DETHNIC4	Other	N H U	No, not other Hispanic Yes, Hispanic Unknown
DETHNIC5	Other literal entry	literal (blank)	
ETHNIC_MVR	Missing value	R S C	Refused Sought but unknown Not obtainable

EDITS:

Before the record is transmitted to the State

Electronic record must contain one or more valid responses as indicated above. If not, a query message appears before the record can be printed or filed. A replica of the entry screen appears and indicates that one of the categories below must be selected before the record can be printed or filed. If states elect to use a missing value variable (ETHNIC_MVR) for this item, it must have a valid missing value code when the ethnicity values are coded to "Unknown."

If "Unknown if Spanish/Hispanic/Latino" is checked, assign the value "S" to the MVR variable and "U" to all other variables. If "Not obtainable" is checked, assign the value "C" to the MVR variable and "U" to all other variables. If the "Refused" box is checked, assign the value "R" to the MVR variable and "U" to all other variables.

PAPER RECORDS

Records filed with no entry are queried. If there is no response to the query, code to "Unknown."

State edits of data file prior to NCHS transmission

For records indicating more than one Hispanic origin, all codes will be transmitted to NCHS.

All "Other (Specify)" literals will be processed through a table of Hispanic origin terms (Appendix H). If the literal is in the table and indicates Hispanic origin, the value of the variable, DETHNIC4, will be set to "H," Hispanic origin. If not, it will be set to "N," "No, not other Hispanic."

Must be valid codes (see above).

STATE FILE CONSIDERATIONS

States opting to electronically code any of the "Other (Specify)" responses to the Hispanic origin question might want to consider using the CDC-HISSB standard coding structure for ethnicity. A field would have to be added to record these codes, and the codes then collapsed into the DVS/NCHS structure for transmission.

Because of the possibility of responses such as "Refused," "Unknown," and "Not obtainable," a missing value variable is recommended to keep track of these responses for intervention or follow-up training as appropriate. All these codes will result in an

"Unknown" code for each of the ethnicity fields. The recommended variable name is
ETHNIC_MVR.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	**LENGTH**	**TYPE**	**VALUES**
DETHNIC1	1	Alpha character string	N, H, U
DETHNIC2	1	Alpha character string	N, H, U
DETHNIC3	1	Alpha character string	N, H, U
DETHNIC4	1	Alpha character string	N, H, U
DETHNIC5	20	Alpha character string	literal, blank

Any of the Hispanic variables may have an "H" code.   If the decedent is not Hispanic, all
codes must be "N's." If the response is "Refused," "Unknown," or "Not obtainable," all
fields must be "U."

EDI TRANSMISSION:

No standards set yet.

Item Title: **DECEDENT'S RACE**

Item Number: **53**

Description: The race(s) that best describes what the decedent considered himself/herself to be.

Source of Information:

      Preferred Source: Informant

INSTRUCTIONS

FOR A PAPER OR ELECTRONIC RECORD:

Funeral Director

ASK: Please look at this card (Appendix I). Please indicate one or more races to describe the race or races _____ thought himself (herself) to be.

PAPER RECORD:

Based on the informant's response, check all appropriate responses on the certificate. If the respondent chooses more than one response, check all that are reported; for example, if "Black" and "Chinese" are reported, check both boxes.

If there is no informant or other reliable source of this information, print "Not obtainable." If the respondent does not know, print "Unknown." If the respondent refuses, print "Refused."

If the informant has named one or more racial responses for which no check box has been checked or seems appropriate, select the "other" check box and enter the literal (written) responses.

If American Indian is selected, ASK:

        Can you tell me with what tribe _____ was affiliated?

        Print the name(s) of the tribe(s) in the space provided.

        If the informant does not know, print "Unknown."

5/4/2001

If the informant refuses, print "Refused."

If "Other Asian" is selected, ASK:

Can you tell me what Asian race_____considered himself (herself) to be?

Print the name(s) of the race(s) in the space provided.

If the informant does not know, print "Unknown."

If the informant refuses, print "Refused."

If "Other Pacific Islander" is selected, ASK:

Can you tell me what Pacific Islander race_____considered himself (herself) to be?

Print the name(s) of the race(s) in the space provided.

If the informant does not know, print "Unknown."

If the informant refuses, print "Refused."

If "Other" is selected, ASK:

Can you tell me what other race_____considered himself (herself) to be?

Print the name(s) of the race(s) in the space provided.

If informant indicates Hispanic, print the specific Hispanic origin even though this has already been noted in the previous item.

If the informant does not know, print "Unknown."

If the informant refuses, print "Refused."

FOR AN ELECTRONIC RECORD:

EDR Developer

The item is completed by selecting one or more races from the menu. The instructions should appear when the item is to be completed.

5/4/2001

Based on the informant's response, select all the appropriate responses from the following menu. If the respondent chooses more than one response, check all that are reported; for example, if "Black" and "Chinese" are reported, select both responses. If there is no informant or other reliable source for this information, check "Not obtainable." If the informant refuses, check "Refused." If the informant does not know, check "Unknown." When all the races the informant has indicated are checked, check the "done" box.

If the informant has named one or more racial responses for which no check box has been checked or seems appropriate, select the "other" check box and enter the literal (written) responses.

Menu

DECENT'S RACE

☐   White
☐   Black or African American
☐   American Indian or Alaskan Native
☐   Asian Indian
☐   Chinese
☐   Filipino
☐   Japanese
☐   Korean
☐   Vietnamese
☐   Other Asian
☐   Native Hawaiian
☐   Guamanian or Chamorro
☐   Samoan
☐   Other Pacific Islander
☐   Other
☐   Unknown
☐   Not obtainable
☐   Refused

☐   Check this box when done

If "American Indian" is selected, a message will appear asking to specify the tribe(s).

American Indian or Alaska Native Tribe

Please specify with what tribe(s) _____ was affiliated.

      Name of the first tribe:_____

Name of the second tribe:_____

If the informant does not know, enter "Unknown."

If the informant refuses, enter "Refused."

If "Other Asian" is selected, a message will appear asking to specify the other Asian race(s).

Other Asian Race

Please specify the Asian race_____considered himself (herself) to be.

Name of the first race:_____

Name of the second race:_____

If the informant does not know, enter "Unknown."

If the informant refuses, enter "Refused."

Other Pacific Islander

If "Other Pacific Islander" is selected, a message will appear asking to specify the other Pacific Islander race(s).

Please specify the Pacific Islander race_____considered himself (herself) to be.

Name of the first race:_____

Name of the second race:_____

If the informant does not know, enter "Unknown."

If the informant refuses, enter "Refused."

Other Race

If "Other" is selected, a message will appear asking to specify the other race.

Please specify the race_____considered himself (herself) to be.

Name of the first race:_____

Name of the second race:_____

If informant indicates Hispanic, record the specific Hispanic origin even though this has already been noted in the previous item.

If the informant does not know, enter "Unknown."

If the informant refused, enter "Refused."

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
RACE1	White checkbox	Y N	Box for race checked Box for race not checked
RACE2	Black or African American checkbox	Y N	Box for race checked Box for race not checked
RACE3	American Indian or Alaska Native checkbox	Y N	Box for race checked Box for race not checked
RACE4	Asian Indian checkbox	Y N	Box for race checked Box for race not checked
RACE5	Chinese checkbox	Y N	Box for race checked Box for race not checked
RACE6	Filipino checkbox	Y N	Box for race checked Box for race not checked
RACE7	Japanese checkbox	Y N	Box for race checked Box for race not checked
RACE8	Korean checkbox	Y N	Box for race checked Box for race not checked
RACE9	Vietnamese checkbox	Y N	Box for race checked Box for race not checked
RACE10	Other Asian checkbox	Y N	Box for race checked Box for race not checked
RACE 11	Native Hawaiian checkbox	Y N	Box for race checked Box for race not checked
RACE 12	Guamanian or Chamorro checkbox	Y N	Box for race checked Box for race not checked

RACE 13	Samoan checkbox	Y		Box for race checked
		N		Box for race not checked
RACE14	Other Pacific Islander checkbox	Y		Box for race checked
		N		Box for race not checked
RACE15	Other checkbox	Y		Box for race checked
		N		Box for race not checked
RACE16	First American Indian or Alaska Native literal	Literal responses		
RACE17	Second American Indian or Alaska Native literal	Literal responses		
RACE18	First Other Asian literal	Literal responses		
RACE19	Second Other Asian literal	Literal responses		
RACE20	First Other Pacific Islander literal	Literal responses		
RACE21	Second Other Pacific Islander literal	Literal responses		
RACE22	First Other literal	Literal responses		
RACE23	Second Other literal	Literal responses		
RDONE	Done box	Y		Yes (done box checked)
		N		No (done box not checked)
RACE_MVR	Missing value variable	R		Refused
		S		Sought but unknown
		C		Not obtainable

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

At least one of the four boxes "Unknown," "Not obtainable," "Refused," or "Done" must be checked before another entry field can appear. If the keyer tries to move to another item, a message should appear asking that the Race of the decedent be completed. If the "Done" box is checked, no other boxes checked, and no literal entries made, each race check box variable is assigned the "N" code, the RACE_MVR variable is assigned the value "S," and all literals are filled with Xs.

Record cannot be filed or printed unless at least one box is checked.

If the "Unknown" box is checked, assign the value "S" to the variable RACE_MVR.

5/4/2001

If the "Not obtainable" box is checked, assign the value "C" to the variable RACE_MVR.

If the "Refused" box is checked, assign the value "R" to the variable RACE_MVR.

If the "Not obtainable," "Unknown," or "Refused" box is checked, and one or more specific race items are checked, the "Not obtainable," "Unknown," or "Refused" boxes are ignored.

When a specific race box is selected (checked), the value Y is assigned to that variable. When the "Done" box is checked, all race items without a Y code will be assigned an N code meaning that the race was not reported.

PAPER RECORD

Records filed with this field blank are queried. If no response to query, assign the "Unknown" code to the MVR variable.

If the response is "Refused," "Unknown," or "Not obtainable," all fields must contain N and the literals X's.

STATE DATA FILE CONSIDERATIONS

After the record is transmitted to the state, the state **MUST** implement the editing and coding algorithms supplied by NCHS. Each race category with a positive response will be assigned a three digit code either directly for check box races or through a table lookup using a table provided by NCHS (Appendix J). If the race is not found in the table, the code for "other" is assigned.

Initial responses can be handled with up to 15 single digit fields for checkboxes and up to eight 30 character fields for literal entries (RACE1-RACE23). Each of the RACE1-RACE23 check box or literal positive responses will be assigned a three digit code based on a scheme to be provided by NCHS. NCHS will also develop an imputation procedure for use when race is unknown. RACE16C-RACE23C retains the three digit codes for literal responses.

An edit and reduction scheme algorithm consistent with the basic year 2000 census edits will be run against the set of values assigned to the set of race variables (NCHS to supply). This will eliminate duplication and determine the best set of codes for the responses. If Hispanic is entered in the "Other" field, an allocation of race will be made at the same time as the edit and reduction scheme algorithm is run.

States will need an additional 8 fields of three digits each for carrying the 8 possible race variables that will be output from the edit routine (RACE1E-RACE8E). These 8 race variables are the ones to be used for tabulation purposes.

States may need to have additional race variables created for their own internal use.

All the processing variables as initially recorded including all the literal entries will be transmitted to NCHS along with the eight assigned codes for tabulation.

Because of possible responses such as "Refused," "Unknown," and "Not obtainable," States must use a missing value variable (*_MVR) to keep track of these responses for intervention or follow-up training as appropriate. The recommended variable name is RACE_MVR.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
RACE1	1	Alpha character string	Y, N
RACE2	1	Alpha character string	Y, N
RACE3	1	Alpha character string	Y, N
RACE4	1	Alpha character string	Y, N
RACE5	1	Alpha character string	Y, N
RACE6	1	Alpha character string	Y, N
RACE7	1	Alpha character string	Y, N
RACE8	1	Alpha character string	Y, N
RACE9	1	Alpha character string	Y, N
RACE10	1	Alpha character string	Y, N
RACE11	1	Alpha character string	Y, N
RACE12	1	Alpha character string	Y, N
RACE13	1	Alpha character string	Y, N
RACE14	1	Alpha character string	Y, N
RACE15	1	Alpha character string	Y, N
RACE16	30	Alpha character string	Literal, blank
RACE17	30	Alpha character string	Literal, blank
RACE18	30	Alpha character string	Literal, blank
RACE19	30	Alpha character string	Literal, blank
RACE20	30	Alpha character string	Literal, blank
RACE21	30	Alpha character string	Literal, blank
RACE22	30	Alpha character string	Literal, blank
RACE23	30	Alpha character string	Literal, blank
RACE1E	3	Numeric character string	Codes forthcoming

RACE2E	3	Numeric character string	Codes forthcoming
RACE3E	3	Numeric character string	Codes forthcoming
RACE4E	3	Numeric character string	Codes forthcoming
RACE5E	3	Numeric character string	Codes forthcoming
RACE6E	3	Numeric character string	Codes forthcoming
RACE7E	3	Numeric character string	Codes forthcoming
RACE8E	3	Numeric character string	Codes forthcoming
RACE16C	3	Numeric character string	Codes forthcoming
RACE17C	3	Numeric character string	Codes forthcoming
RACE18C	3	Numeric character string	Codes forthcoming
RACE19C	3	Numeric character string	Codes forthcoming
RACE20C	3	Numeric character string	Codes forthcoming
RACE21C	3	Numeric character string	Codes forthcoming
RACE22C	3	Numeric character string	Codes forthcoming
RACE23C	3	Numeric character string	Codes forthcoming
RACE_MVR	1	Alpha character string	R, S, C

EDI TRANSMISSION:

No standards set yet.

5/4/2001

Item Titles: **DECEDENT'S USUAL OCCUPATION**
KIND OF BUSINESS/INDUSTRY

Item Numbers: **54 & 55**

Description: Information on the decedent's usual occupation and type of industry employed in during most of his (her) working life.

Source of Information:

Preferred Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

Funeral Director

Complete items 54 and 55 only for decedents 14 years of age or older.

For item 54 (Decedent's Usual Occupation), print or type the decedent's usual occupation. Record the kind of work the decedent did during most of his or her working life, such as claim adjuster, farmhand, coal miner, janitor, store manager, college professor, or civil engineer. This is not necessarily the last occupation of the decedent.

Do not enter "retired."

If the decedent was a homemaker at the time of death but had worked outside the household during his or her working life, enter that occupation.

If the decedent was a homemaker during most of his or her working life and had not worked outside the household, enter "Homemaker."

If the decedent was a student at the time of death and was never regularly employed or employed full time during his or her working life, enter "Student."

If not known, print or type "Unknown."

For item 55 (Kind of Business/Industry), the kind of business or industry to which the occupation in item 54 is related, such as insurance, farming, coal mining, hardware store, retail clothing, university, or government should be entered.

5/4/2001

Do not enter the name of the company, firm, or organization.

If "homemaker" is entered in item 54, enter "Own home" or "Someone else's home."

If "student" is entered in item 54, enter the type of school, such as high school or college.

If not known, enter "Unknown."

FOR AN ELECTRONIC RECORD:

EDR Developer

Calculated age should be checked to see if the decedent is 14 years of age or older. If decedent is not at least 14 years of age, the screens for items 54 and 55 should not appear. If a calculated age field is not available, use the given age fields.

Suggested Method:

The instructions should appear when the item is to be completed.

Decedent's Usual Occupation

Enter below the kind of work decedent did during most of his or her working life, such as claim adjuster, farmhand, coal miner, janitor, store manager, college professor, or civil engineer. This is not necessarily the last occupation of the decedent.

Do not enter "retired."

If a student at the time of death and was never regularly employed or employed full time during his or her working life, enter "student."

If not known, enter "Unknown."

Decedent's usual occupation: _____

If "Retired" is entered, the following message appears:

"Retired" is not an acceptable entry. Please enter the decedent's occupation during most of his or her working life.

Decedent's usual occupation: _____

If "Student" is entered for occupation, the following message and menu appears:

"Student" was entered as the decedent's usual occupation.

Please choose one of the boxes below.

- ☐ **Grade school**
- ☐ **Middle school**
- ☐ **Junior high school**
- ☐ **High school**
- ☐ **College or university**
- ☐ **Vocational school**
- ☐ **Unknown**

Once a choice is made the data are entered in the field for item 55 and item 55 will not appear.

If "Homemaker" is entered, the following message appears:

If the decedent worked outside the household at any time during his or her working life then please enter that occupation rather than homemaker. Please check the appropriate box.

- ☐ **"Homemaker" is correct.**
- ☐ **"Homemaker" is not correct.**

If the second response is chosen, the original screen reappears.

If "Homemaker" is correct for occupation, the following screen appears:

"Homemaker" was entered as the decedent's usual occupation.
Please choose one of the boxes below.

- ☐ **Homemaker in own home**
- ☐ **Homemaker in someone else's home**

Once a choice is made, the data are entered in the field for item 55 and item 55 will not appear.

For item 55, the method below is suggested. The instruction should appear when the item is to be completed.

Kind of Business or Industry

Enter below the kind of business or industry to which the occupation in item 54 is related, such as insurance, farming, coal mining, hardware store, retail clothing, university, or government.

Do not enter the name of the company, firm, or organization.

If not known, enter "Unknown."

Kind of business or industry _____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES
OCCUP	Usual occupation	Literal
INDUST	Kind of business or industry	Literal

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORDS

None at this time.

PAPER RECORDS

None at this time.

State edits of data file prior to NCHS transmission

None at this time.

STATE FILE CONSIDERATIONS

It is recommended that States record the literal entry for both the occupation and kind of business or industry. States may opt to code these entries using the SOIC software distributed by NIOSH. States will need two literal fields of at least 30 characters each for these entries.

NCHS TRANSMISSION FILE

At this time the data will not be transmitted to NCHS.

LIST OF APPENDICES

TITLE	APPENDIX
SEX-SPECIFIC CAUSES OF DEATH	A
Both Underlying Cause and Multiple Cause	A-1
Multiple Cause Only	A-2
COUNTRY CODES	B
CITY CODES	C
STATE & TERRITORY CODES	D
DETAILED PLACE OF INJURY	E
DETAILED ACTIVITIES CODES	F
EDUCATION LEVEL CARD	G
TABLE OF HISPANIC ORIGINS	H
RACE ITEM CARD	I
RACE AND INDIAN TRIBE LISTS	J
TRANSPORTS	K

5/4/2001

APPENDIX A

APPENDIX A-1

Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

1=Absolute

ICD-10 Code	Sex limitation	Sex	Edit Code[1]
A34	Female, 10-54 years	1	14
B26.0	Male	1	10
B37.3	Female, 28 days and over	1	13
C51	Female	1	11
C52	Female	1	11
C53	Female	1	11
C54	Female	1	11
C55	Female	1	11
C56	Female	1	11
C57	Female	1	11
C58	Female, 10-54 years	1	14
C60	Male	1	10
C61	Male	1	10
C62	Male	1	10
C63	Male	1	10
C79.6	Female	1	11
D06	Female	1	11
D07.0	Female	1	11
D07.1	Female	1	11
D07.2	Female	1	11
D07.3	Female	1	11
D07.4	Male	1	10
D07.5	Male	1	10
D07.6	Male	1	10
D17.6	Male	1	10
D25	Female	1	11
D26	Female	1	11
D27	Female	1	11
D28	Female	1	11
D29	Male	1	10
D39.0	Female	1	11
D39.1	Female	1	11
D39.2	Female, 10-54 years	1	14
D39.7	Female	1	11
D39.9	Female	1	11

5/4/2001

D40	Male	1	10
E28	Female	1	11
E29	Male	1	10
F52.4	Male, 10 years and over	1	19
F52.5	Female, 10 years and over	1	18
F53	Female, 10-54 years	1	14
I86.1	Male	1	10
I86.3	Female	1	11
L29.1	Male	1	10
L29.2	Female	1	11
L70.5	Female, 1 year and over	1	21
M80.0	Female	1	11
M80.1	Female	1	11
M81.0	Female	1	11
M81.1	Female	1	11
M83.0	Female, 10-54 years	1	14
N40	Male	1	10
N41	Male	1	10
N42	Male	1	10
N43	Male	1	10
N44	Male	1	10
N45	Male	1	10
N46	Male	1	10
N47	Male	1	10
N48	Male	1	10
N49	Male	1	10
N50	Male	1	10
N70	Female	1	11
N71	Female	1	11
N72	Female	1	11
N73	Female	1	11
N75	Female	1	11
N76	Female	1	11
N80	Female	1	11
N81	Female	1	11
N82	Female	1	11
N83	Female	1	11
N84	Female	1	11
N85	Female	1	11
N86	Female	1	11
N87	Female	1	11
N88	Female	1	11
N89	Female	1	11
N90	Female	1	11
N91	Female	1	11
N92	Female	1	11

N93	Female	1	11
N94	Female	1	11
N95	Female	1	11
N96	Female, 10-54 years	1	14
N97	Female, 10-54 years	1	14
N98	Female, 10-54 years	1	14
O00	Female, 10-54 years	1	14
O01	Female, 10-54 years	1	14
O02	Female, 10-54 years	1	14
O03	Female, 10-54 years	1	14
O04	Female, 10-54 years	1	14
O05	Female, 10-54 years	1	14
O06	Female, 10-54 years	1	14
O07	Female, 10-54 years	1	14
O10	Female, 10-54 years	1	14
O11	Female, 10-54 years	1	14
O12	Female, 10-54 years	1	14
O13	Female, 10-54 years	1	14
O14	Female, 10-54 years	1	14
O15	Female, 10-54 years	1	14
O16	Female, 10-54 years	1	14
O20	Female, 10-54 years	1	14
O21	Female, 10-54 years	1	14
O22	Female, 10-54 years	1	14
O23	Female, 10-54 years	1	14
O24	Female, 10-54 years	1	14
O25	Female, 10-54 years	1	14
O26	Female, 10-54 years	1	14
O28	Female, 10-54 years	1	14
O29	Female, 10-54 years	1	14
O30	Female, 10-54 years	1	14
O31	Female, 10-54 years	1	14
O32	Female, 10-54 years	1	14
O33	Female, 10-54 years	1	14
O34	Female, 10-54 years	1	14
O35	Female, 10-54 years	1	14
O36	Female, 10-54 years	1	14
O40	Female, 10-54 years	1	14
O41	Female, 10-54 years	1	14
O42	Female, 10-54 years	1	14
O43	Female, 10-54 years	1	14
O44	Female, 10-54 years	1	14
O45	Female, 10-54 years	1	14
O46	Female, 10-54 years	1	14
O47	Female, 10-54 years	1	14
O48	Female, 10-54 years	1	14

O60	Female, 10-54 years	1	14
O61	Female, 10-54 years	1	14
O62	Female, 10-54 years	1	14
O63	Female, 10-54 years	1	14
O64	Female, 10-54 years	1	14
O65	Female, 10-54 years	1	14
O66	Female, 10-54 years	1	14
O67	Female, 10-54 years	1	14
O68	Female, 10-54 years	1	14
O69	Female, 10-54 years	1	14
O70	Female, 10-54 years	1	14
O71	Female, 10-54 years	1	14
O72	Female, 10-54 years	1	14
O73	Female, 10-54 years	1	14
O74	Female, 10-54 years	1	14
O75	Female, 10-54 years	1	14
O85	Female, 10-54 years	1	14
O86	Female, 10-54 years	1	14
O87	Female, 10-54 years	1	14
O88	Female, 10-54 years	1	14
O89	Female, 10-54 years	1	14
O90	Female, 10-54 years	1	14
O91	Female, 10-54 years	1	14
O92	Female, 10-54 years	1	14
O95	Female, 10-54 years	1	14
O96	Female, 10-54 years	1	14
O97	Female, 10-54 years	1	14
O98	Female, 10-54 years	1	14
O99	Female, 10-54 years	1	14
P54.6	Female, under 1 year	1	22
Q50	Female	1	11
Q51	Female	1	11
Q52	Female	1	11
Q53	Male	1	10
Q54	Male	1	10
Q55	Male	1	10
Q96	Female	1	11
Q97	Female	1	11
Q98	Male	1	10
R86	Male	1	10
R87	Female	1	11
Y42.4	Female, 10-54 years	1	14
Y42.5	Female	1	11
Y76	Female	1	11

5/4/2001

1 Edit codes may be useful for programming the age/sex limitations as follows:

Edit code   Limited to
    10   Male
    11   Female
    13   Female, 28 days and over
    14   Female, 10-54 years
    18   Female, 10 years and over
    19   Male, 10 years and over
    21   Female, 1 year and over
    22   Female, under 1 year

Source: Table G in NCHS, Instruction manual, part 11.

APPENDIX A-2

**Sex/Cause Consistency Edits for ICD-10 Codes
Valid for Multiple Cause-of-Death Classification Only**

1=Absolute

ICD-10 code	Sex limitation	Sex	Edit code[1]
E89.4	Female	1	11
E89.5	Male	1	10
N99.2	Female	1	11
N99.3	Female	1	11
O08	Female, 10-54	1	14
S31.2	Male	1	10
S31.3	Male	1	10
S31.4	Female	1	11
S37.4	Female	1	11
S37.5	Female	1	11
S37.6	Female	1	11

[1] Edit codes may be useful for programming the sex limitations as follows:

Edit code	Limited to
10	Male
11	Female
14	Female, 10-54 years

Source: Table H in NCHS, Instruction manual, part 11.

5/4/2001

APPENDIX B

COUNTRY CODES

COUNTRY	CODE	COUNTRY	CODE	COUNTRY	CODE
AFGHANISTAN	AF	CAMEROON	CM	FRANCE	FR
ALBANIA	AL	CANADA	CA	FRENCH GUIANA	FG
ALGERIA	AG	CAPE VERDE	CV	FRENCH POLYNESIA	FP
AMERICAN SAMOA	AQ	CAYMAN ISLANDS	CJ	FRENCH SOUTHERN	
ANDORRA	AN	CENTRAL AFRICAN		AND ANTARCTIC	
ANGOLA	AO	REPUBLIC	CT	LANDS	FS
ANGUILLA	AV	CHAD	CD	GABON	GB
ANTARCTICA	AY	CHILE	CI	GAMBIA, THE	GA
ANTIGUA AND		CHINA	CH	GAZA STRIP	GZ
BARBUDA	AC	CHRISTMAS		GEORGIA	GG
ARGENTINA	AR	ISLAND	KT	GERMANY	GM
ARMENIA	AM	CLIPPERTON		GHANA	GH
ARUBA	AA	ISLAND	IP	GIBRALTAR	GI
ASHMORE AND		COCOS (KEELING)		GLORIOSO ISLANDS	GO
CARTIER		ISLANDS	CK	GREECE	GR
ISLANDS	AT	COLOMBIA	CO	GREENLAND	GL
AUSTRALIA	AS	COMOROS	CN	GRENADA	GJ
AUSTRIA	AU	CONGO	CF	GUADELOUPE	GP
AZERBAIJAN	AJ	COOK ISLANDS	CW	GUAM	GQ
BAHAMAS, THE	BF	CORAL SEA		GUATEMALA	GT
BAHRAIN	BA	ISLANDS	CR	GUERNSEY	GK
BAKER ISLAND	FQ	COSTA RICA	CS	GUINEA	GV
BANGLADESH	BG	COTE D'IVOIRE	IV	GUINEA-BISSAU	PU
BARBADOS	BB	CROATIA	HR	GUYANA	GY
BASSAS DA		CUBA	CU	HAITI	HA
INDIA	BS	CYPRUS	CY	HEARD ISLAND AND	
BELARUS	BO	CZECH REPUBLIC	EZ	MCDONALD	
BELGIUM	BE	DENMARK	DA	ISLANDS	HM
BELIZE	BH	DJIBOUTI	DJ	HONDURAS	HO
BENIN	BN	DOMINICA	DO	HONG KONG	HK
BERMUDA	BD	DOMINICAN		HOWLAND ISLAND	HQ
BHUTAN	BT	REPUBLIC	DR	HUNGARY	HU
BOLIVIA	BL	ECUADOR	EC	ICELAND	IC
BOSNIA AND		EGYPT	EG	INDIA	IN
HERZEGOVINA	BK	EL SALVADOR	ES	INDONESIA	ID
BOTSWANA	BC	EQUATORIAL		IRAN	IR
BOUVET ISLAND	BV	GUINEA	EK	IRAQ	IZ
BRAZIL	BR	ERITREA	ER	IRELAND	EI
BRITISH INDIAN		ESTONIA	EN	ISRAEL	IS
OCEAN		ETHIOPIA	ET	ITALY	IT
TERRITORY	IO	EUROPA ISLAND	EU	JAMAICA	JM
BRITISH VIRGIN		FALKLAND ISLANDS		JAN MAYEN	JN
ISLANDS	VI	(ISLAS		JAPAN	JA
BRUNEI	BX	MALVINAS)	FK	JARVIS ISLAND	DQ
BULGARIA	BU	FAROE ISLANDS	FO	JERSEY	JE
BURKINA	UV	FEDERATED STATES		JOHNSTON ATOLL	JQ
BURMA	BM	OF MICRONESIA	FM	JORDAN	JO
BURUNDI	BY	FIJI	FJ	JUAN DE NOVA	
CAMBODIA	CB	FINLAND	FI	ISLAND	JU

COUNTRY	CODE	COUNTRY	CODE	COUNTRY	CODE
KAZAKHSTAN	KZ	NICARAGUA	NU	SPAIN	SP
KENYA	KE	NIGER	NG	SPRATLY ISLANDS	PG
KINGMAN REEF	KQ	NIGERIA	NI	SRI LANKA	CE
KIRIBATI	KR	NIUE	NE	SUDAN	SU
KOREA, DEMOCRATIC		NORFOLK ISLAND	NF	SURINAME	NS
PEOPLE'S		NORTHERN MARIANA		SVALBARD	SV
REPUBLIC OF	KN	ISLANDS	CQ	SWAZILAND	WZ
KOREA,		NORWAY	NO	SWEDEN	SW
REPUBLIC OF	KS	OMAN	MU	SWITZERLAND	SZ
KUWAIT	KU	PAKISTAN	PK	SYRIA	SY
KYRGYZSTAN	KG	PALMYRA ATOLL	LQ	TAJIKISTAN	TI
LAOS	LA	PANAMA	PM	TANZANIA	TZ
LATVIA	LG	PAPUA NEW GUINEA	PP	THAILAND	TH
LEBANON	LE	PARACEL ISLANDS	PF	TOGO	TO
LESOTHO	LT	PARAGUAY	PA	TOKELAU	TL
LIBERIA	LI	PERU	PE	TONGA	TN
LIBYA	LY	PHILIPPINES	RP	TRINIDAD AND	
LIECHTENSTEIN	LS	PITCAIRN ISLANDS	PC	TOBAGO	TD
LITHUANIA	LH	POLAND	PL	TROMELIN ISLAND	TE
LUXEMBOURG	LU	PORTUGAL	PO	TRUST TERRITORY OF	
MACAU	MC	PUERTO RICO	RQ	THE PACIFIC	
MACEDONIA	MK	QATAR	QA	ISLANDS (PALAU)	PS
MADAGASCAR	MA	REUNION	RE	TUNISIA	TS
MALAWI	MI	ROMANIA	RO	TURKEY	TU
MALAYSIA	MY	RUSSIA	RS	TURKMENISTAN	TX
MALDIVES	MV	RWANDA	RW	TURKS AND	
MALI	ML	ST. KITTS AND		CAICOS ISLANDS	TK
MALTA	MT	NEVIS	SC	TUVALU	TV
MAN, ISLE OF	IM	ST. HELENA	SH	UGANDA	UG
MARSHALL ISLANDS	RM	ST. LUCIA	ST	UKRAINE	UP
MARTINIQUE	MB	ST. PIERRE AND		UNITED ARAB	
MAURITANIA	MR	MIQUELON	SB	EMIRATES	TC
MAURITIUS	MP	ST. VINCENT AND		UNITED KINGDOM	UK
MAYOTTE	MF	THE GRENADINES	VC	UNITED STATES	US
MEXICO	MX	SAN MARINO	SM	URUGUAY	UY
MIDWAY ISLANDS	MQ	SAO TOME AND		UZBEKISTAN	UZ
MOLDOVA	MD	PRINCIPE	TP	VANUATU	NH
MONACO	MN	SAUDI ARABIA	SA	VATICAN CITY	VT
MONGOLIA	MG	SENEGAL	SG	VENEZUELA	VE
MONTENEGRO	MW	SERBIA	SR	VIETNAM	VM
MONTSERRAT	MH	SEYCHELLES	SE	VIRGIN ISLANDS	VQ
MOROCCO	MO	SIERRA LEONE	SL	WAKE ISLAND	WQ
MOZAMBIQUE	MZ	SINGAPORE	SN	WALLIS AND	
NAMIBIA	WA	SLOVAKIA	LO	FUTUNA	WF
NAURU	NR	SLOVENIA	SI	WEST BANK	WE
NAVASSA ISLAND	BQ	SOLOMON ISLANDS	BP	WESTERN SAHARA	WI
NEPAL	NP	SOMALIA	SO	WESTERN SAMOA	WS
NETHERLANDS	NL	SOUTH AFRICA	SF	YEMEN	YM
NETHERLANDS		SOUTH GEORGIA		ZAIRE	CG
ANTILLES	NT	AND THE SOUTH		ZAMBIA	ZA
NEW CALEDONIA	NC	SANDWICH		ZIMBABWE	ZI
NEW ZEALAND	NZ	ISLANDS	SX	TAIWAN	TW

Not classifiable.   ZZ

Source: FIPS 10-4 (related to ISO 3166) at http://164.214.2.59/gns/html/fips/fip10-4.html

APPENDIX C

CITY & COUNTY CODES

CITY CODES

VALID   **VALUE**

See FIPS 55 name table

Not classifiable   99999

Source: FIPS 55 name table at http://www.itl.nist.gov/fipspubs/

COUNTY

VALID   **VALUE**

See FIPS 6-4 name table

Not classifiable   999

Source: FIPS 6-4 name table at http://www.itl.nist.gov/fipspubs/

5/4/2001

APPENDIX D

STATE & TERRITORY CODES

<u>VALID</u>   <u>VALUES</u>

Alabama	01
Alaska	02
Arizona	04
Arkansas	05
California	06
Colorado	08
Connecticut	09
Delaware	10
Florida	12
Georgia	13
Hawaii	15
Idaho	16
Illinois	17
Indiana	18
Iowa	19
Kansas	20
Kentucky	21
Louisiana	22
Maine	23
Maryland	24
Massachusetts	25
Michigan	26
Minnesota	27
Mississippi	28
Missouri	29
Montana	30
Nebraska	31
Nevada	32
New Hampshire	33
New Jersey	34
New Mexico	35
New York	36
North Carolina	37
North Dakota	38
Ohio	39
Oklahoma	40

Oregon	41
Pennsylvania	42
Rhode Island	44
South Carolina	45
South Dakota	46
Tennessee	47
Texas	48
Utah	49
Vermont	50
Virginia	51
Washington	53
West Virginia	54
Wisconsin	55
Wyoming	56
District of Columbia	11
American Samoa	60
Northern Marianas	69
Puerto Rico	72
Virgin Islands	78
Guam	66
Unknown or blank	ZZ

APPENDIX E

PLACE OF INJURY CODES

Below is a detailed list and code structure for place of injury. For electronic records the certifier enters a literal description of the place of injury: the literal is retained in one item and it is coded into a second item using a table look up at the time the certifier completes the certificate. For paper records the literal entry is keyed and the table look up is done at the time the records are processed in the state office.

DESCRIPTION | **CODE**

HOME | **0**
	Excludes: Abandoned or derelict house (8); Home under construction, but not yet occupied (6); Institutional place of residence (1)

About home	Penthouse
Apartment	Private driveway to home
Boarding house	Private garage
Cabin	Private garden to home
Caravan (trailer) park-residential	Private walk to home
Farm house	Private wall to home
Hogan	Residence
Home premises	Romming house
Home sidewalk	Swimming pool in private home or garden
Home swimming pool	Trailer camp or court
House (residential)	Yard to home
Noninstitutional place of residence	Yard NOS

RESIDENTIAL INSTITUTION | **1**

Almshouse	Nurses's home
Army camp	Nursing home
Children's home	Old people's home
Dormitory	Orphanage
Fraternity house	Pensioner's home
Home for the sick	Prison camp
Hospice	Prison
Institution (any type)	Reform school
Jail	State school
Military (camp) (reservation)	Sorority house

SCHOOL, OTHER INSTITUTION AND PUBLIC ADMINISTRATIVE AREA   2
Excludes: Building under construction (6); Residential institution (1); Sports and athletic areas (3)

Armory

Assembly hall

Campus

Child center

Church

Cinema

Clubhouse

College

Country club (grounds)

Court house

Dance hall

Day nursery (Day care)

Drive in theater

Fire house

Gallery

Health resort

Hospital

Institute of higher learning

Kindergarten

Library

Mission

Movie house

Museaum

Music hall

Night club

Opera house

Playground, school

Police precinct

Police station or cell

Post office

Private club

Public hall

Salvation Army

School (grounds) (yard)

School (private) (public) (State)

Theatre

Turkish bath

University

YMCA

YWCA

Youth center

SPORTS AND ATHLETICS AREA   3
Excludes: Swimming pool or tennis court in private home or garden (0)

Baseball field

Basketball court

Cricket ground

Dude ranch

Fives court

Football field

Golf course

Gymnasium

Hockey field

Hunting cabin

Ice palace

Racecourse

Riding school

Rifle range NOS

Skating rink

Sports palace

Sports ground

Squash court

Stadium

Swimming pool (public)(private)

Tennis court

STREET AND HIGHWAY   4

Alley	Pavement
Bridge NOS	Roadside
Freeway	Road
Interstate	Sidewalk NOS
Motorway	Named street/highway/interstate

TRADE AND SERVICE AREA   5
Excludes: Garage in private home (0)

Airport	Market (grocery or other commodity)
Bank	Motel
Bar	Office (building)
Body shop	Radio/Television broadcasting station
Café	Restaurant
Casino	Salvage lot (named)
Electric company	Service station
Filling station	Shop, commercial
Funeral home	Shopping center (shopping mall)
Garage away from highway except home	Station (bus) (railway)
Garage building	Store
Garage NOS	Subway (stairs)
Garage- place of work	Tourist court
Gas station	Tourist home
Hotel	Warehouse
Loading platform- store	

INDUSTRIAL AND CONSTRUCTION AREA   6

Building under construction	Gravel pit
Coal pit	Highway under construction
Coalyard	Industrial yard
Construction job	Loading platform-factory
Dairy processing plant	Logging operation area
Dockyard	Mill pond
Dry dock	Oil field
Electric tower	Oil rig and other offshore installations
Factory (building) (premises)	Oil well
Foundary	Plant, industrial
Gas works	Power-station (coal) (nuclear) (oil)
Grain elevator	Produce building

Railroad track or trestle
Railway yard
Sand pit
Sawmill
Sewage disposal plant
Shipyard
Shop

Substation (power)
Subway track
Tannery
Tunnel under construction
Wharf
Workshop

FARM   **7**
    Excludes: Farm house and home premises of farm (0)

Barn NOS
Barnyard
Corncrib
Cornfield
Dairy (farm) NOS
Farm buildings
Farm pond or creek
Farmland under cultivation

Field, numbered or specialized
Gravel pit on farm
Orange grove
Pasture
Range NOS
Silo
State farm
Ranch NOS

OTHER SPECIFIED PLACES   **8**

Abandoned gravel pit
Abandoned public building or home
Air force firing range
Bar pit or ditch
Beach NOS (private) (named)
Beach resort
Boy's camp
Camp
Camping grounds
Campsite
Canal
Caravan site NOS
Cemetery
City dump
Damsite
Derelict house
Desert
Ditch
Dock NOS
Excavation site
Fairgrounds

Field NOS
Forest
Fort
Harbour
Hill
Holiday camp
Irrigation canal or ditch
Junkyard
Lake NOS
Lake resort
Manhole
Marsh
Military training ground
Mountain
Mountain cabin
Mountain resort
Named city
Named lake
Named town
Nursery NOS
Open field
Park (any) (amusement)(public)

Parking lot
Parking place
Pier
Pipeline (oil)
Place of business NOS
Playground NOS
Pond or pool (natural)
Powerline pole
Prairie
Private property
Public place NOS
Public property
Railway line

Reservoir (water)
Resort NOS
River
Sea
Seashore NOS
Seashore resort
Sewer
Specified address
Stream
Swamp
Vacation resort
Woods
Zoo

UNSPECIFIED PLACE   9

Bed
Building NOS
Commode
Country
Downstairs
Fireplace
Jobsite

Near any place
On job
Parked car
Sofa
Table
Tree

Source: Based on Appendix I in NCHS Instruction manual, part 2g.

APPENDIX F

Activity   Code

While engaged in sports activity   0

Physical exercise with a described functional element such as:

Golf	Skiing
Jogging	Swimming
Riding	Trekking
School athletics	Waterskiing

While engaged in leisure activity   1
        Excludes: sport activities (0)

Hobby activities
Leisure time activities with an entertainment element such as going to
        the cinema, to a dance or to a party
Participation in sessions and activities of voluntary organizations

While working for income   2

Paid work (manual) (professional)
Transportation (time) to and from such activities
Work for salary, bonus, and other types of income

While engaged in other types of work   3

Domestic duties such as:

Caring for children and relatives	Duties for which one would not normally
Cleaning	gain an income
Colling	Learning activities, e.g., attending school
Gardening	session or lesson
Household maintenance	Undergoing education

While resting, sleeping, eating and other vital activities   4

While engaged in other specified activities   8

During unspecified activity   9

Source: Instruction manual, part 2g.

APPENDIX G

Decedent's Educational Level Selection Card

Decedent's Formal Education Level

What was the highest degree or level of school the decedent COMPLETED? Choose only ONE. If the decedent is currently enrolled, mark the previous grade of highest degree received.

A.   8th grade or less
B.   9th-12th grade; no diploma
C.   High School Graduate or GED completed
D.   Some college credit; but no degree
E.   Associate Degree (for example: AA, AS)
F.   Bachelor's Degree (for example: BA, AB, BS)
G.   Master's Degree (for example: MA, MS, MEng, MEd, MSW, MBA)
H.   Doctorate or Professional Degree (for example: PhD, EdD, MD,DDS, DVM, LLB, JD)

APPENDIX H

Decedent's Hispanic Origin Selection Card

Please review all the responses below. Please pick the response that best describes whether the decedent is Spanish/Hispanic/Latino. Choose the NO response is the decedent is not Spanish/Hispanic/Latino

A.   No, Not Spanish/Hispanic/Latino
B.   Yes, Puerto Rican
C.   Yes, Mexican, Mexican American, Chicano
D.   Yes, Cuban
E.   Yes, Other Spanish/Hispanic/Latino

If your choice is E. (Other Spanish/Hispanic/Latino) please specify.

APPENDIX I

Decedent's Race(s) Selection Card

Decedent's Race(s)

What is the item(s) below that best describes what race(s) the decedent considered himself/herself to be. Select all that apply.

A. White
B. Black or African American
C. American Indian or Alaska Native
    Please provide the name of the enrolled or principle tribe
D. Asian Indian
E. Chinese
F. Filipino
G. Japanese
H. Korean
I. Vietnamese
J. Other Asian-----Please Specify
K. Native Hawaiian
L. Guamanian or Chamorro
M. Samoan
N. Other Pacific Islander-----Please Specify
O. Other-----Please Specify

APPENDIX J

RACE AND AMERICAN INDIAN AND ALASKA NATIVE TRIBE CODES

VALID   **VALUE**

APPENDIX K: TRANSPORTS

Types of vehicle

Motor vehicle designed primarily for on-road use
Automobile (Car, minivan, minibus)
Truck (Pickup)
Van
Heavy transport vehicle (Tractor-trailer truck, panel truck)
Bus
Motor vehicle (Stated as Motor Vehicle or MV)
Stated "Traffic Accident", no vehicle specified on record

Motorcycle
Motorcycle, motorscooter (Includes motorized bicycle, motorcycle with sidecar)
Motorized tricycle
Moped

Work vehicle (in transit)
Industrial vehicle (Coal car, logging car, battery powered vehicle, baggage truck, other)
Tractor
Other agricultural vehicle (Combine, harvester)
Construction vehicle (Road scraper, road grader, backhoe, snowplow)
Bulldozer

Recreational Vehicle
All-terrain vehicle (ATV)
Off-road vehicle (Go cart, minibike, dirt bike, race car, three wheeler, golf cart)
Snowmobile

Other (in transit)
Other ground transport (Army tank, hovercraft over land)

Water craft
Merchant Ship
Passenger ship (Ferry, liner)
Ship, unspecified
Fishing Boat, powered
Fishing Boat, unpowered
Fishing Boat, unspecified
Sailboat
Yacht
Canoe or Kayak
Inflatable craft (Unpowered, raft)
Water-skis
Other powered watercraft (Hovercraft over water, jetski, powerboat)

9/10/2001

Other unpowered watercraft(Surf board, wind surfer)
Unspecified watercraft (Boat)

Aircraft - Powered
Helicopter (Non-military)
Ultralight (Microlight, powered glider)
Private airplane
Commercial airplane (Commercial jet, 747, etc.)
Military aircraft (C-130, F-15, military helicopter, etc.)
Space craft
Other specified powered aircraft (Airplane, jet, Cessna, blimp, etc.)

Aircraft - Unpowered and Unspecified
Balloon
Hang glider
Glider
Parachute
Other specified non-powered aircraft (Kite)
Unspecified non-powered aircraft
Unspecified aircraft

Railed Vehicle
Railway Train (Subway)
Streetcar (Cable car on rails, tram, trolley)

Other vehicles
Cable car (Not on rails or unspecified)
Ski lift, gondola
Ice yacht, land yacht
Other vehicle

Non motor vehicle
Pedal cycle (Bicycle, tricycle)
Other non motor vehicle

Animal
Animal being ridden
Animal drawn vehicle
Other animal

Objects set in motion by
Railway train
Motor vehicle
Non-motor vehicle

9/10/2001